

Bright Stars Family Daycare

Issaquah, WA

Transportation Impact Analysis

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Table of Contents

FINDINGS/CONCLUSIONS	1
Project Description	2
Project Approach	2
Primary Data and Information Sources	2
EXISTING CONDITIONS.....	5
Roadway Network	5
Transit Service.....	5
Pedestrian & Bicycle Facilities	5
Traffic Volumes.....	5
Collision History	7
Intersection Levels of Service	7
FUTURE CONDITIONS.....	9
Project Trip Generation	9
Project Trip Distribution/Assignment	9
Future Traffic Volumes	12
Intersection Levels of Service	15
Safety	16
Neighborhood Impacts.....	16
Pedestrian & Bicycle Impacts	16
MITIGATION	17
Off-Site Improvements.....	17
Impact Fees.....	17

Appendices

- Appendix A – Existing Traffic Counts
- Appendix B – Trip Generation Calculations
- Appendix C – Level of Service Calculations

List of Figures and Tables

Figure 1 Project Site Vicinity	3
Figure 2 Preliminary Site Plan	4
Figure 3 Existing 2022 Weekday Peak Hour Traffic Volumes	6
Figure 4 Peak Hour Project Trip Assignment.....	11
Figure 5 Future 2024 No Action Weekday Peak Hour Traffic Volumes	13
Figure 6 Future 2024 With Project Weekday Peak Hour Traffic Volumes.....	14
Table 1 Existing Study Area Roadway Network	5
Table 2 Crash Data Summary by Year, January 1, 2016 to December 31, 2020.....	7
Table 3 LOS Criteria for Signalized and Stop-Controlled Intersections ¹	8
Table 4 Existing 2022 Weekday Peak Hour LOS Summary.....	8
Table 5 Bright Stars Family Daycare – Trip Generation Summary	9
Table 6 Future 2024 Weekday Peak Hour LOS Summary	15
Table 7 Bright Stars Family Daycare – Impact Fee Rates	17

FINDINGS/CONCLUSIONS

This Transportation Impact Analysis (TIA) was prepared for the proposed Bright Stars Family Daycare project located at 355 E Sunset Way in the City of Issaquah.

Project Proposal. The proposed Bright Stars Family Daycare project is located at 355 E Sunset Way in Issaquah, WA. The project would replace an existing single-family home with a daycare with a capacity of up to 59 students. Parking would be provided by 18 on-site parking stalls with access provided by the alley along the south side of the property. Full project buildout is expected by 2024.

Trip Generation. The Bright Stars Family Daycare project is estimated to generate a total of 58 net new weekday daily trips with 11 net new trips during the AM peak hour (6 entering, 5 exiting) and 11 net new trips during the PM peak hour (6 entering, 5 exiting). It should be noted that the reported net new trips account for both pass-by and diverted trip reductions.

Future Year LOS. Weekday AM and PM peak hour LOS analyses were conducted at four (4) off-site study intersections. The results of the LOS analyses show that the signalized study intersection and each of the individual movements at the stop-controlled study intersections are anticipated to operate at LOS C or better in 2024 during both the weekday AM and PM peak hours with the proposed project.

Mitigation:

Off-Site Improvements. Based on the results of the traffic analysis, all four (4) off-site study intersections are expected to operate at acceptable levels with buildout of the proposed project. Therefore, no project-specific off-site transportation improvements are proposed.

Transportation Impact Fees. To mitigate long-term traffic impacts, the City of Issaquah requires payment of a traffic impact fee and a bicycle and pedestrian mitigation fee. Per the City's Transportation Impact and Bike & Pedestrian Mitigation Fee Rates table, the fees associated with a Day Care Center are to be determined by the TIA. The impact fee for the proposed Bright Stars Family Daycare project was calculated consistent with the methodology included in the City of Issaquah *Traffic Impact Fee and Bicycle and Pedestrian Mitigation Fee Updated* (2019). The derived impact fee rates for the proposed Bright Stars Family Daycare project are \$3,237.24 (traffic impact fee, per student) and \$479.12 (bicycle and pedestrian mitigation fee, per student). Based on the derived impact fee rates and the anticipated max enrollment of the proposed daycare (59 students), the resulting impact fees were calculated to be as follows:

- Traffic Impact Fee = \$190,997.16 (59 students x \$3,237.24 per student)
- Bicycle and Pedestrian Mitigation Fee = \$28,268.08 (59 students x \$479.12 per student)

INTRODUCTION

This Transportation Impact Analysis (TIA) was prepared for the proposed Bright Stars Family Daycare project located at 355 E Sunset Way in the City of Issaquah as shown in the **Figure 1** vicinity map.

Project Description

The proposed Bright Stars Family Daycare project is located at 355 E Sunset Way in Issaquah, WA. The project would replace an existing single-family home with a daycare with a capacity of up to 59 students. Parking would be provided by 18 on-site parking stalls with access provided by the alley along the south side of the property. Full project buildout is expected by 2024. A site plan is provided in **Figure 2**.

Project Approach

The specific scope items included in the evaluation of traffic impacts and recommended mitigation measures were discussed and confirmed by City staff. To analyze the traffic impacts from the proposed Bright Stars Family Daycare project, the following tasks were undertaken:

- Assessed existing conditions through field reconnaissance and reviewed existing planning documents.
- Estimated trip generation and documented trip distribution and assignment of project traffic.
- Documented traffic forecasts and assumptions for year 2024 conditions without and with the proposed project.
- Conducted weekday AM and PM peak hour level of service analyses at four (4) off-site study intersections:
 1. 2nd Ave SE/E Sunset Way
 2. 2nd Ave SE/Alley
 3. 4th Pl SE/E Sunset Way
 4. 4th Pl SE/Alley
- Identified transportation mitigation fees to the City of Issaquah.

Primary Data and Information Sources

- Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.
- 2022 peak hour traffic counts, IDAX.
- *Highway Capacity Manual (HCM)*, 6th Edition, 2016.
- City of Issaquah Traffic Impact Fee and Bicycle and Pedestrian Mitigation Fee Update, 2019.

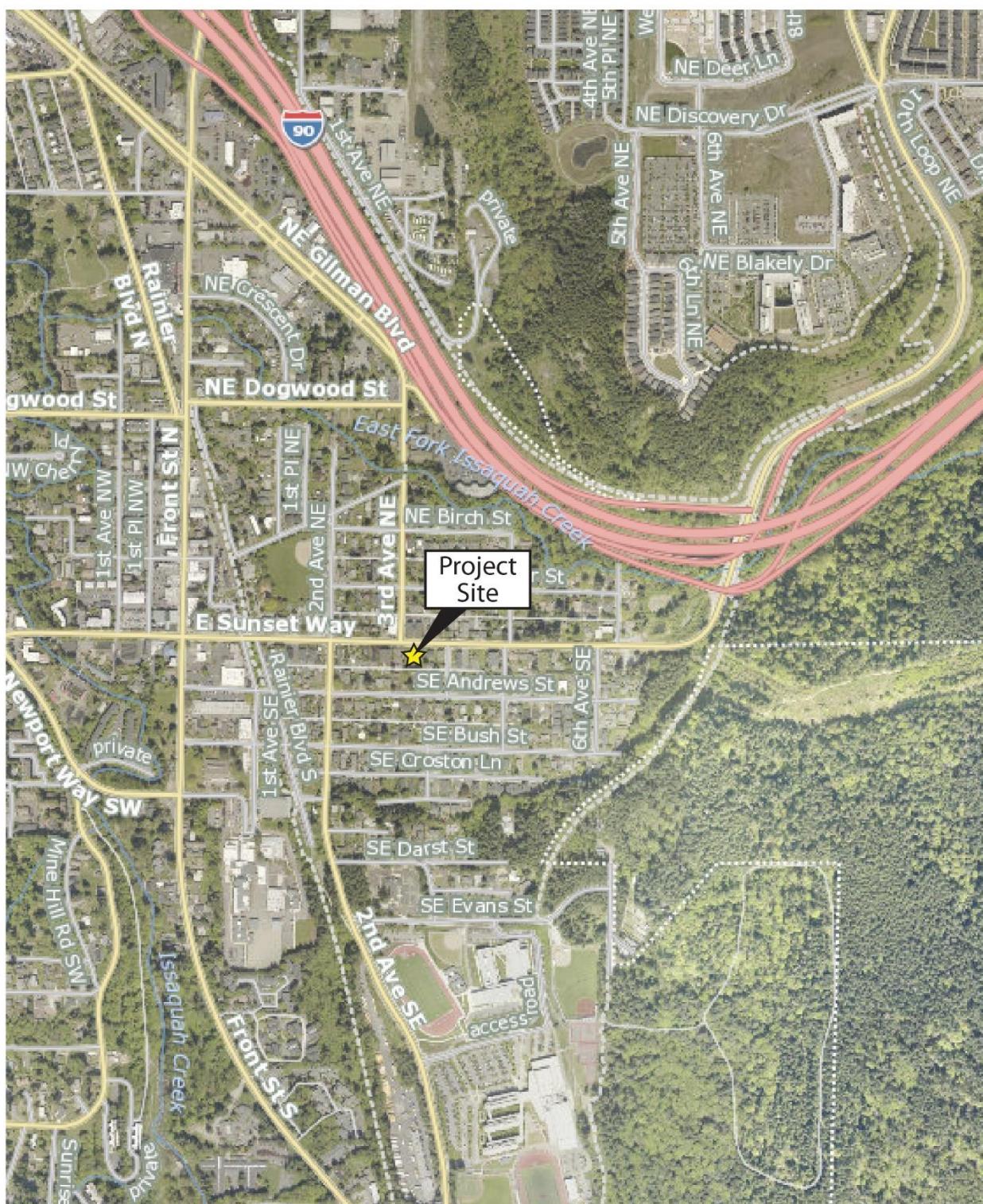


Figure 1: Project Site Vicinity

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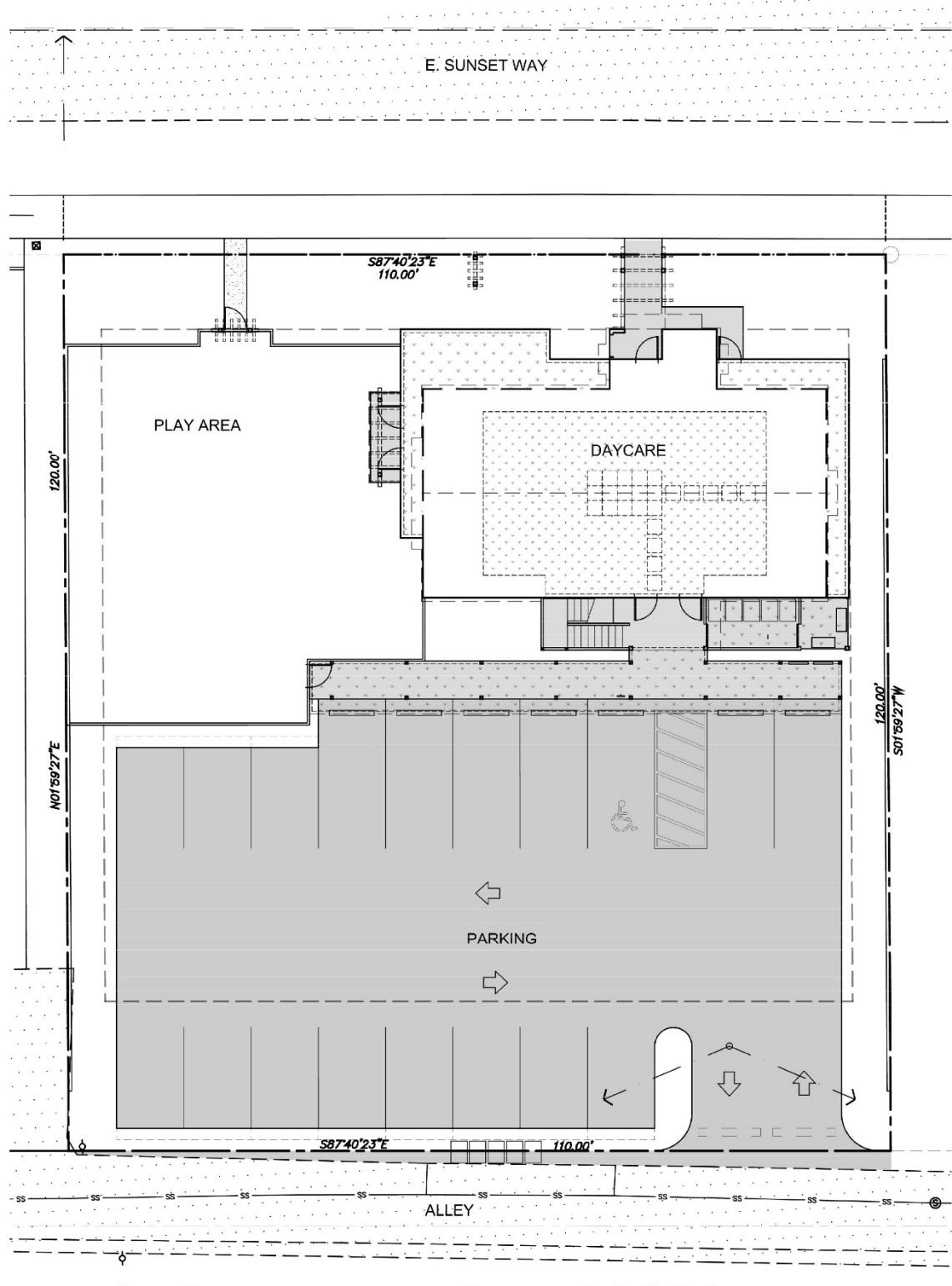


Figure 2: Preliminary Site Plan

EXISTING CONDITIONS

Roadway Network

Table 1 describes the existing characteristics of the streets that would be used as primary routes to and from the site. Roadway characteristics are described in terms of orientation, arterial classification, number of lanes, posted speed limits, parking, pedestrian facilities, and bicycle facilities. The relationship of these roadways to the project site is shown in **Figure 1**.

Table 1
Existing Study Area Roadway Network

Roadway	Orientation	Arterial Classification	# of Travel Lanes	Posted Speed Limit (mph)	Parking	Sidewalks	Bicycle Facilities
E Sunset Way	E/W	Minor Arterial	2	25	South Side	Both Sides	None
2 nd Avenue SE	N/S	Local Road	2	25	Both Sides	Both Sides	None
4 th Place SE	N/S	Local Road	2	25	Both Sides	Both Sides	None

Transit Service

Transit services to and from the project vicinity are provided by King County Metro. The closest bus stops are located on E Sunset Way near 5th Ave SE and on 2nd Ave SE near SE Andrews Street providing access to route 208. Route 208 provides daily transit service between the Issaquah Transit Center and North Bend with approximately 75-90 minute headways.

Pedestrian & Bicycle Facilities

Existing pedestrian facilities in the vicinity of the proposed project include sidewalks on both sides of E Sunset Way, 2nd Ave SE, and 4th Pl SE. Crosswalks with pedestrian pushbuttons exist on all four legs of the adjacent 2nd Ave SE/E Sunset Way signalized intersection. A marked pedestrian crossing also exists on E Sunset Way on the east side of 4th Pl SE.

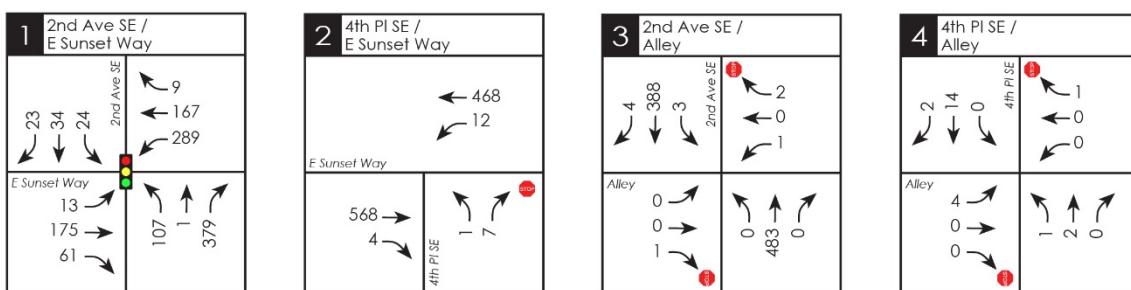
There are currently no bicycle facilities in the project study area.

Traffic Volumes

Existing weekday AM and PM peak hour traffic volumes at the four (4) off-site study intersections were based on counts conducted by IDAX on Tuesday, April 5, 2022. **Figure 3** illustrates the 2022 existing weekday AM and PM peak hour traffic volumes at the four (4) off-site study intersections. **Appendix A** includes the existing peak hour turning movement data.



AM Peak Hour



PM Peak Hour

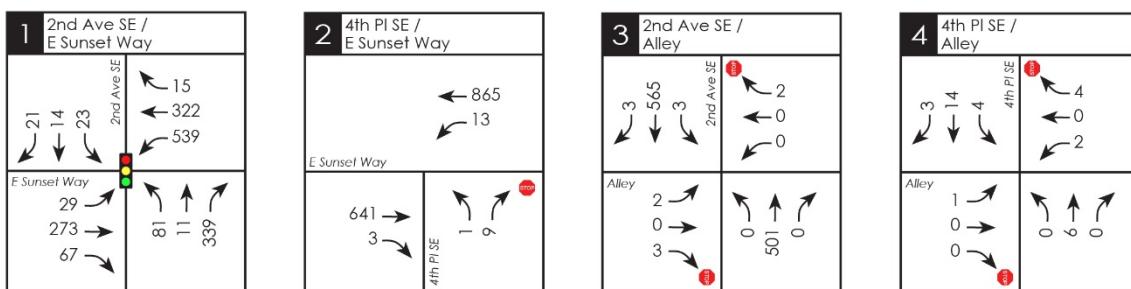


Figure 3: 2022 Existing Peak Hour Traffic Volumes

Collision History

Collision records in the study area were reviewed for the five-year period from January 1, 2016 to December 31, 2020 (the most recent 5-year period as provided by WSDOT). Summaries of the total, yearly average, and calculated collisions per million entering vehicles (MEV) during this period are provided in **Table 2**.

Table 2
Crash Data Summary by Year, January 1, 2016 to December 31, 2020

Intersection	2016	2017	2018	2019	2020	5-Year Total Crashes	Average Annual Crash Frequency	Collisions per MEV ¹
1. 2 nd Ave SE/E Sunset Way	2	2	0	0	1	5	1.00	0.16
2. 4 th Pl SE/E Sunset Way	0	0	0	0	0	0	0.00	0.00
3. 2 nd Ave SE/Alley	0	0	0	0	0	0	0.00	0.00
4. 4 th Pl SE/Alley	0	0	0	0	0	0	0.00	0.00

Source: WSDOT Crash Data.

1. MEV = Million Entering Vehicles.

Intersection Levels of Service

Existing weekday AM and PM peak hour level of service (LOS) analyses were conducted at the four (4) off-site study intersections using the methodology and procedures outlined in the 6th Edition of the *Highway Capacity Manual* and Synchro 10 traffic analysis software.

LOS generally refers to the degree of congestion on a roadway or intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS. At signalized intersections, LOS A represents free-flow conditions (motorists experience little or no delays), and LOS F represents forced-flow conditions where motorists experience an average delay in excess of 80 seconds per vehicle.

The LOS reported for signalized intersections represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The LOS reported at stop-controlled intersections is based on the average control delay and can be reported for each controlled minor approach, controlled minor lane group, and controlled major-street movement (and for the overall intersection at all-way stop controlled intersections).

Table 3 outlines the current HCM 6th Edition LOS criteria for signalized and unsignalized intersections based on these methodologies.

Table 3
LOS Criteria for Signalized and Stop-Controlled Intersections¹

Control Delay (sec/veh)	SIGNALIZED INTERSECTIONS		UN SIGNALIZED INTERSECTIONS		
	<u>LOS by Volume-to Capacity (V/C) Ratio²</u>		Control Delay (sec/veh)	<u>LOS by Volume-to Capacity (V/C) Ratio³</u>	
≤ 1.0	> 1.0	≤ 10	≤ 1.0	> 1.0	
≤ 10	A	F	≤ 10	A	F
> 10 to ≤ 20	B	F	> 10 to ≤ 15	B	F
> 20 to ≤ 35	C	F	> 15 to ≤ 25	C	F
> 35 to ≤ 55	D	F	> 25 to ≤ 35	D	F
> 55 to ≤ 80	E	F	> 35 to ≤ 50	E	F
> 80	F	F	> 50	F	F

1) Source: Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.

2) For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.

3) For two-way stop-controlled intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop controlled intersections. For approach-based and intersection-wide assessments at all-way stop controlled intersections, LOS is solely defined by control delay.

The existing weekday AM and PM peak hour LOS results are summarized in **Table 4**. The detailed LOS calculations are provided in **Appendix B**.

Table 4
Existing 2022 Weekday Peak Hour LOS Summary

Study Intersection / Movement	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
<u>Signalized Intersection:</u>				
1. 2 nd Ave NE/E Sunset Way	B	18.8	C	28.2
<u>Stop-Controlled Intersections:</u>				
2. 4 th Pl SE/E Sunset Way				
Northbound Approach	B	14.4	C	16.1
Westbound Left-Turn	A	8.8	A	9.0
3. 2 nd Ave SE/Alley				
Northbound Left-Turn	A	0.0	A	0.0
Eastbound Approach	B	11.1	C	17.3
Westbound Approach	C	15.8	B	11.8
Southbound Left-Turn	A	8.6	A	8.6
4. 4 th Pl SE/Alley				
Northbound Left-Turn	A	7.3	A	0.0
Eastbound Approach	A	9.0	A	8.7
Westbound Approach	A	8.3	A	8.5
Southbound Left-Turn	A	0.0	A	7.2

As shown in **Table 4**, the signalized study intersection and each of the individual movements at the stop-controlled study intersections currently operate at LOS C or better during the weekday AM and PM peak hours under existing conditions.

FUTURE CONDITIONS

Project Trip Generation

The trip generation estimate for the proposed project was based on the methodology included in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition for Land Use Code (LUC) 565 (Day Care Center). Consistent with prior correspondence with City of Issaquah staff, adjustments to the gross trip generation were made to account for pass-by and diverted link trips. No existing trip credit was taken for the existing single-family home on the site since the home has been vacant for more than one year.

Per the ITE *Trip Generation Handbook*, 3rd Edition, "*A diverted trip is attracted from the volume on roadways within the vicinity of the generator but without direct access to the site. A diverted trip requires a diversion from a roadway not adjacent to the site to another roadway to gain direct access to the site.*" As such, diverted trips are not new trips on the road network. Based on data included in the recently published ITE *Trip Generation Manual* 11th Edition, a diverted trip reduction of 44% and a pass-by trip reduction of 32% were used to assess the net new trips associated with the proposed daycare. The resulting net new weekday daily, AM, and PM peak hour trip generation associated with the proposed project is summarized in **Table 5**.

Table 5
Bright Stars Family Daycare – Trip Generation Summary

Time Period	Net New Trips Generated		
	In	Out	Total
Weekday Daily	29	29	58
Weekday AM Peak Hour	6	5	11
Weekday PM Peak Hour	6	5	11

As shown in **Table 5**, the proposed project is estimated to generate 58 net new weekday daily trips, with 11 net new trips occurring during the weekday AM peak hour (6 entering, 5 exiting) and 11 net new trips occurring during the weekday PM peak hour (6 entering, 5 exiting). Detailed trip generation calculations are included in [Appendix B](#).

Project Trip Distribution/Assignment

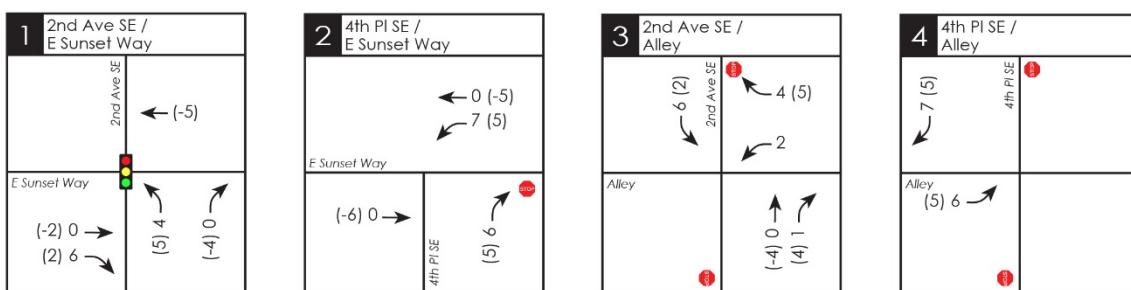
The distribution of the net new and diverted link trips was based on information provided by the applicant and confirmed with City staff through the traffic scoping process. In general, daycare trips were distributed as follows:

- 40 percent to/from the northeast via Highlands Drive NE
- 20 percent to/from the south via Front Street S
- 15 percent to/from the north via Front Street
- 15 percent to/from the northwest via Newport Way NW
- 10 percent to/from the east via I-90

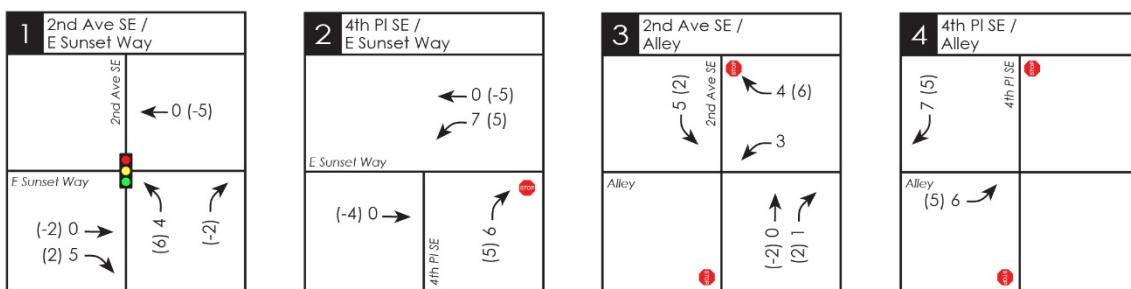
The assignment of the diverted link trips assumed that trips would primarily “divert” from eastbound on I-90 (50 percent) and southbound on Front Street (50 percent). As a result, the diverted link trips would be considered “new” trips at the study intersections. The resulting trip assignment at the four (4) study intersections is shown in **Figure 4**.



AM Peak Hour



PM Peak Hour



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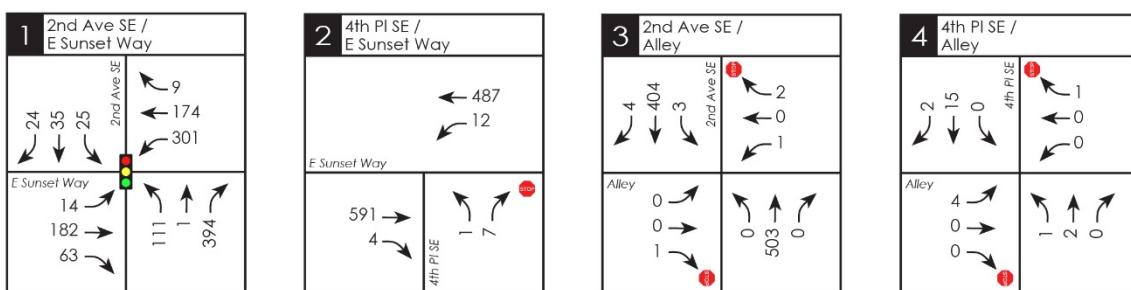
Figure 4: Peak Hour Project Trip Assignment

Future Traffic Volumes

To estimate future 2024 No Action (without project) weekday AM and PM peak hour traffic volumes, a two (2) percent annual growth rate was applied to the existing volumes. The resulting future 2024 No Action weekday AM and PM peak hour traffic volumes at the four (4) off-site study intersections are shown in **Figure 5**. The 2024 With Project traffic volumes were determined by adding the trip assignment from the proposed project (shown in **Figure 4**) to the future 2024 No Action traffic volumes (shown in **Figure 5**). The 2024 With Project weekday AM and PM peak hour traffic volumes are shown in **Figure 6**.



AM Peak Hour



PM Peak Hour

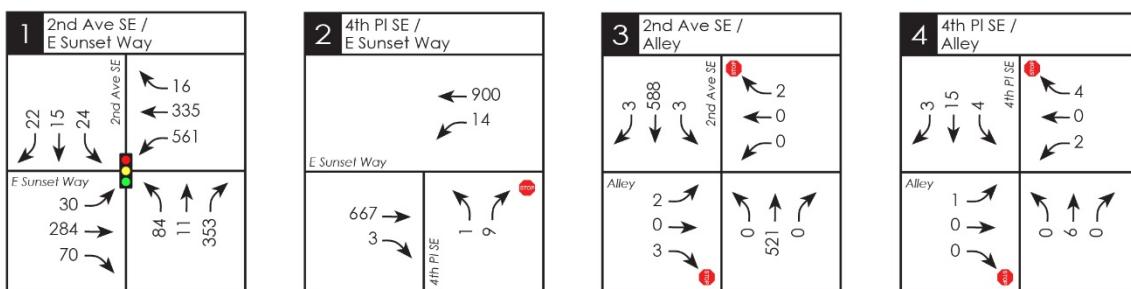
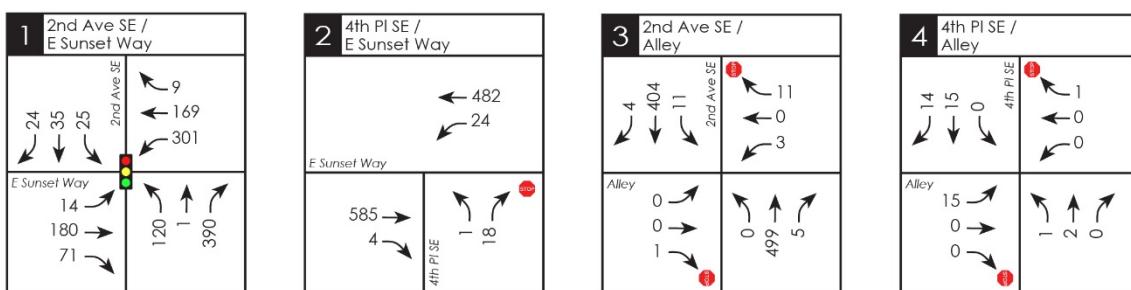


Figure 5: 2024 No Action Peak Hour Traffic Volumes



AM Peak Hour



PM Peak Hour

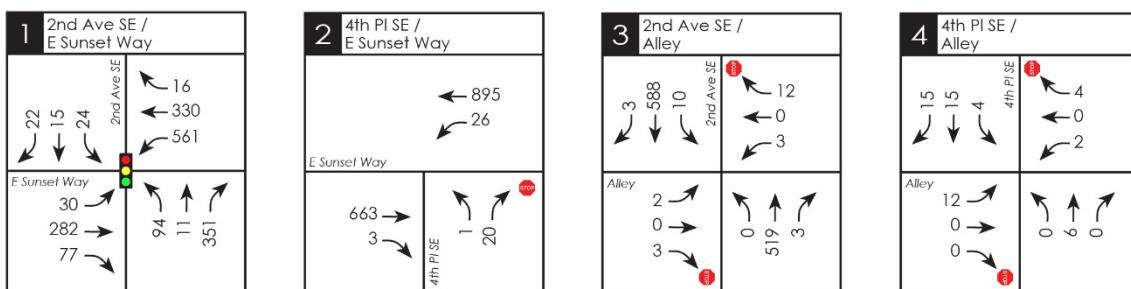


Figure 6: 2024 With Project Peak Hour Traffic Volumes

Intersection Levels of Service

Future 2024 weekday AM and PM peak hour LOS analyses were conducted at the four (4) off-site study intersections for future no action (without project) and with project conditions. The results of the analysis are summarized in **Table 6** below. Detailed LOS results are provided in **Appendix C**.

Table 6
Future 2024 Weekday Peak Hour LOS Summary

Study Intersection / Movement	<u>No Action</u>		<u>With Project</u>	
	LOS	Delay (sec)	LOS	Delay (sec)
AM Peak Hour				
<i>Signalized Intersection:</i>				
1. 2 nd Ave NE/E Sunset Way	B	19.5	B	19.4
<i>Stop-Controlled Intersections:</i>				
2. 4 th Pl SE/E Sunset Way				
Northbound Approach	B	14.8	B	14.3
Westbound Left-Turn	A	8.9	A	9.0
3. 2 nd Ave SE/Alley				
Northbound Left-Turn	A	0.0	A	0.0
Eastbound Approach	B	11.2	B	11.2
Westbound Approach	C	16.4	C	15.5
Southbound Left-Turn	A	8.7	A	8.8
4. 4 th Pl SE/Alley				
Northbound Left-Turn	A	7.3	A	7.3
Eastbound Approach	A	9.0	A	9.1
Westbound Approach	A	8.3	A	8.3
Southbound Left-Turn	A	0.0	A	0.0
PM Peak Hour				
<i>Signalized Intersection:</i>				
1. 2 nd Ave NE/E Sunset Way	C	34.6	C	34.1
<i>Stop-Controlled Intersections:</i>				
2. 4 th Pl SE/E Sunset Way				
Northbound Approach	C	16.8	C	15.6
Westbound Left-Turn	A	9.1	A	9.2
3. 2 nd Ave SE/Alley				
Northbound Left-Turn	A	0.0	A	0.0
Eastbound Approach	C	18.1	C	18.6
Westbound Approach	B	12.0	C	15.7
Southbound Left-Turn	A	8.6	A	8.7
4. 4 th Pl SE/Alley				
Northbound Left-Turn	A	0.0	A	0.0
Eastbound Approach	A	8.7	A	8.8
Westbound Approach	A	8.5	A	8.5
Southbound Left-Turn	A	7.2	A	7.2

As shown in **Table 6**, the signalized study intersection and each of the individual movements at the stop-controlled study intersections are anticipated to operate at LOS C or better during the weekday AM and PM peak hours with the proposed Bright Stars Family Daycare project.

It should be noted that some of the reported delays slightly decrease in the future with the proposed project. The slight decrease in the reported delay is likely due to the addition of project trips to movements that have delays lower than the reported average. For example, at a stop-controlled movement, the delay for a right-turning vehicle will be less than the delay for a left-turning vehicle.

Safety

According to the City's TIA Guidelines, the addition of 10 or more peak hour trips to a High Accident Location (HAL) is considered a probable significant adverse impact. When a development proposal impacts a HAL, the City may require reasonable mitigation even if the LOS thresholds are not exceeded. The City may also consider other safety threshold requirements.

Based on the most recent 5-year collision data at the study intersections, there were only five (5) total collisions reported at the 2nd Ave SE/SE Sunset Way intersection and zero reported collisions at the other study intersections. It is unlikely that any of these intersections would be considered a HAL.

Neighborhood Impacts

Parking for the proposed Bright Stars Family Daycare would be provided by 18 on-site parking stalls with access provided by the alley along the south side of the property. The alley, which runs parallel to E Sunset Way, also provides access to several other adjacent parcels between 2nd Ave SE and 4th Pl SE. Given that the proposed project will have access via the existing alley, all project generated traffic is anticipated to utilize the alley to access the site. As shown in **Table 6** above, all movements at the alley intersections are anticipated to operate at an acceptable LOS C or better without or with the proposed project. No neighborhood cut-through traffic is expected to occur as a result of the proposed project.

Pedestrian & Bicycle Impacts

With the proposed Bright Stars Family Daycare project, some increase in pedestrian and bicycle traffic may result from families who live in the vicinity of the daycare. This additional pedestrian and bicycle traffic generated by the proposed project is anticipated to be adequately served by the existing pedestrian and bicycle facilities in the vicinity of the project which includes sidewalks on both sides of E Sunset Way, 2nd Ave SE, and 4th Pl SE. Crosswalks with pedestrian pushbuttons exist on all four legs of the adjacent 2nd Ave SE/E Sunset Way signalized intersection. A marked pedestrian crossing also exists on E Sunset Way on the east side of 4th Pl SE.

MITIGATION

The following measures are proposed to mitigate the transportation impacts of the proposed Bright Stars Family Daycare project.

Off-Site Improvements

Based on the results of the traffic analysis, all four (4) off-site study intersections are expected to operate at acceptable levels with buildout of the proposed project. Therefore, no project-specific off-site transportation improvements are proposed.

Impact Fees

To mitigate long-term traffic impacts, the City of Issaquah requires payment of a traffic impact fee and a bicycle and pedestrian mitigation fee. Per the City's Transportation Impact and Bike & Pedestrian Mitigation Fee Rates table, the fees associated with a Day Care Center are to be determined by the TIA.

The impact fee for the proposed Bright Stars Family Daycare project was calculated consistent with the City of Issaquah *Traffic Impact Fee and Bicycle and Pedestrian Mitigation Fee Updated* (2019) and includes the following factors:

- ITE Vehicle Trip Rate = 0.79 (Based on LUC 565, per student)
- Person Trip Factor = 1.52 (City standard)
- Percent New Trips = 44% (per ITE)
- Traffic Impact Fee cost per person trip end = \$6,108 per person trip (City standard)
- Bicycle and Pedestrian Mitigation Fee cost per person trip end = \$904 per person trip (City standard)

Table 7
Bright Stars Family Daycare – Impact Fee Rates

A PM Trip Rate (veh/student)	B Percent New Trips	C Vehicle to Person Trip Factor	D = A x B x C New PM Peak Hour Person Trip Ends	E Cost per Person Trip End	F = D x E Impact Fee Rate
<u>Traffic</u>					
0.79	44%	1.52	0.53	\$6,108	\$3,237.24 per student
<u>Bike & Ped</u>					
0.79	44%	1.52	0.53	\$904	\$479.12 per student

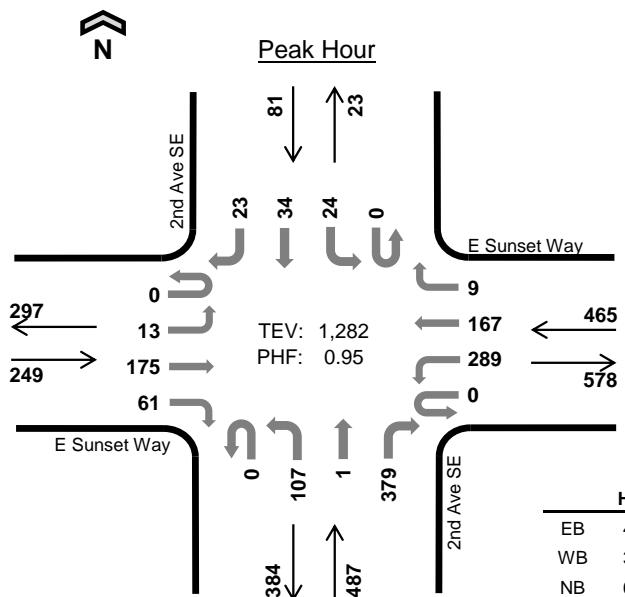
Based on the derived rates shown in **Table 7** and the anticipated max enrollment of the proposed day care (59 students), the resulting impact fees are shown below:

- Traffic Impact Fee = \$190,997.16 (59 students x \$3,237.24 per student)
- Bicycle and Pedestrian Mitigation Fee = \$28,268.08 (59 students x \$479.12 per student)

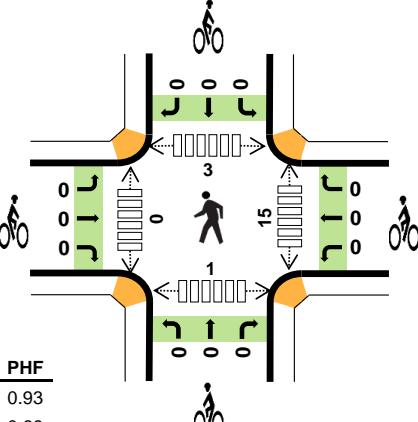
Appendix A

Existing Traffic Volumes

2nd Ave SE E Sunset Way



Date: 04/05/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



Two-Hour Count Summaries

Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	26	11	0	55	20	0	0	9	0	76	0	4	0	2	203	0		
7:15 AM	0	4	25	27	0	135	33	2	0	11	0	78	0	6	11	6	338	0		
7:30 AM	0	3	46	18	0	68	42	1	0	21	0	81	0	7	20	6	313	0		
7:45 AM	0	2	58	7	0	41	59	4	0	30	0	97	0	4	1	8	311	1,165		
8:00 AM	0	4	46	9	0	45	33	2	0	45	1	123	0	7	2	3	320	1,282		
8:15 AM	0	2	35	7	0	30	59	0	0	28	3	128	0	4	2	6	304	1,248		
8:30 AM	0	2	44	8	0	29	50	3	0	16	0	85	0	1	1	6	245	1,180		
8:45 AM	0	4	43	11	0	55	71	4	0	8	2	102	0	4	4	6	314	1,183		
Count Total	0	21	323	98	0	458	367	16	0	168	6	770	0	37	41	43	2,348	0		
Peak Hour	All	0	13	175	61	0	289	167	9	0	107	1	379	0	24	34	23	1,282	0	
	HV	0	1	6	5	0	10	6	1	0	3	0	27	0	1	1	0	61	0	
	HV%	-	8%	3%	8%	-	3%	4%	11%	-	3%	0%	7%	-	4%	3%	0%	5%	0	

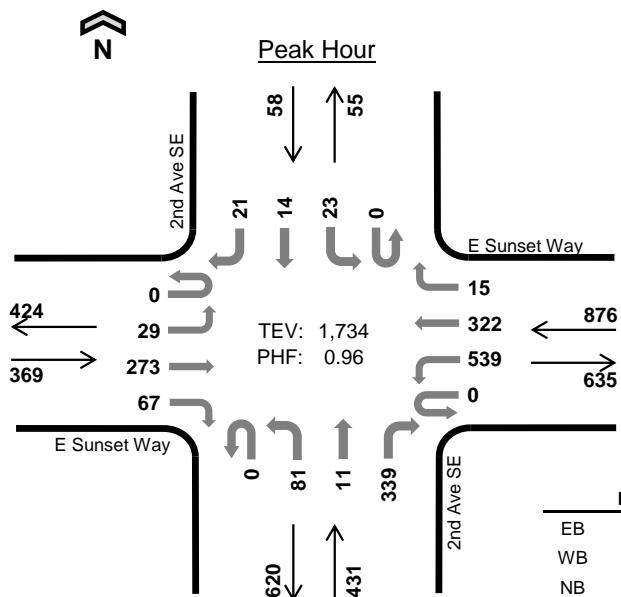
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	1	19	0	23	0	0	0	0	0	0	1	1	0	2
7:15 AM	2	5	9	0	16	0	0	0	0	0	2	0	2	0	4
7:30 AM	5	3	5	2	15	0	0	0	0	0	4	0	0	1	5
7:45 AM	0	2	8	0	10	0	0	0	0	0	7	0	0	0	7
8:00 AM	5	7	8	0	20	0	0	0	0	0	2	0	1	0	3
8:15 AM	2	3	11	0	16	0	0	0	0	0	0	2	1	0	3
8:30 AM	2	6	10	0	18	0	0	0	0	0	0	1	0	0	1
8:45 AM	5	6	8	0	19	0	0	0	0	0	0	0	0	1	1
Count Total	24	33	78	2	137	0	0	0	0	0	15	4	5	2	26
Peak Hour	12	17	30	2	61	0	0	0	0	0	15	0	3	1	19

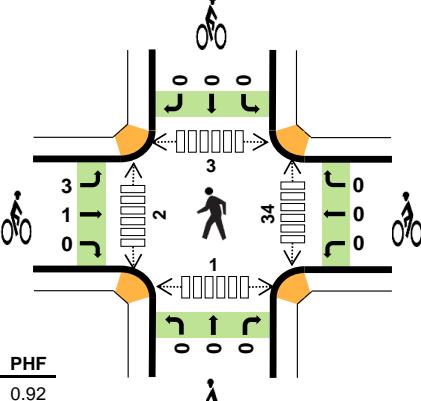
Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	3	0	0	0	1	0	0	3	0	16	0	0	0	0	23	0		
7:15 AM	0	0	0	2	0	3	1	1	0	1	0	8	0	0	0	0	16	0		
7:30 AM	0	1	2	2	0	2	1	0	0	1	0	4	0	1	1	0	15	0		
7:45 AM	0	0	0	0	0	1	1	0	0	0	0	8	0	0	0	0	10	64		
8:00 AM	0	0	4	1	0	4	3	0	0	1	0	7	0	0	0	0	20	61		
8:15 AM	0	0	1	1	0	0	3	0	0	0	0	11	0	0	0	0	16	61		
8:30 AM	0	0	2	0	0	2	4	0	0	0	0	10	0	0	0	0	18	64		
8:45 AM	0	0	2	3	0	2	4	0	0	2	0	6	0	0	0	0	19	73		
Count Total	0	1	14	9	0	14	18	1	0	8	0	70	0	1	1	0	137	0		
Peak Hour	0	1	6	5	0	10	6	1	0	3	0	27	0	1	1	0	61	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
8:00 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
8:15 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0	0	0	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

2nd Ave SE E Sunset Way



Date: 04/05/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



Two-Hour Count Summaries

Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound												
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	10	71	21	0	128	82	7	0	23	1	110	0	6	5	7	471	0	
4:15 PM	0	6	70	19	0	106	54	4	0	29	3	105	0	7	7	7	417	0	
4:30 PM	0	12	57	19	0	126	83	7	0	24	2	87	0	6	4	5	432	0	
4:45 PM	0	11	65	14	0	136	85	2	0	20	1	55	0	7	3	5	404	1,724	
5:00 PM	0	2	81	17	0	135	75	4	0	14	5	96	0	9	3	7	448	1,701	
5:15 PM	0	4	70	17	0	142	79	2	0	23	3	101	0	1	4	4	450	1,734	
5:30 PM	0	8	60	20	0	105	64	5	0	27	4	99	0	4	2	4	402	1,704	
5:45 PM	0	6	63	10	0	105	82	4	0	27	1	105	0	5	3	2	413	1,713	
Count Total	0	59	537	137	0	983	604	35	0	187	20	758	0	45	31	41	3,437	0	
Peak Hour	All	0	29	273	67	0	539	322	15	0	81	11	339	0	23	14	21	1,734	0
	HV	0	1	3	4	0	35	5	0	0	1	1	9	0	0	0	1	60	0
	HV%	-	3%	1%	6%	-	6%	2%	0%	-	1%	9%	3%	-	0%	0%	5%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	12	2	0	18	0	0	0	0	0	0	0	0	3	3
4:15 PM	8	11	7	0	26	1	0	0	0	1	1	0	2	0	3
4:30 PM	4	14	4	0	22	0	0	0	0	0	10	1	1	0	12
4:45 PM	1	9	2	0	12	1	0	0	0	1	24	0	0	1	25
5:00 PM	2	11	3	0	16	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	6	2	1	10	3	0	0	0	3	0	1	2	0	3
5:30 PM	1	5	1	0	7	0	0	0	0	0	3	0	0	1	4
5:45 PM	2	1	1	0	4	0	0	0	0	0	0	0	0	3	3
Count Total	23	69	22	1	115	5	0	0	0	5	38	2	5	8	53
Peak Hour	8	40	11	1	60	4	0	0	0	4	34	2	3	1	40

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	1	2	1	0	10	2	0	0	0	0	2	0	0	0	0	18	0		
4:15 PM	0	0	4	4	0	11	0	0	0	1	0	6	0	0	0	0	26	0		
4:30 PM	0	1	1	2	0	11	3	0	0	1	0	3	0	0	0	0	22	0		
4:45 PM	0	0	0	1	0	8	1	0	0	0	0	2	0	0	0	0	12	78		
5:00 PM	0	0	1	1	0	10	1	0	0	0	1	2	0	0	0	0	16	76		
5:15 PM	0	0	1	0	0	6	0	0	0	0	0	2	0	0	0	1	10	60		
5:30 PM	0	0	1	0	0	3	2	0	0	0	0	1	0	0	0	0	7	45		
5:45 PM	0	0	2	0	0	1	0	0	0	0	0	1	0	0	0	0	4	37		
Count Total	0	2	12	9	0	60	9	0	0	2	1	19	0	0	0	1	115	0		
Peak Hour	0	1	3	4	0	35	5	0	0	1	1	9	0	0	0	1	60	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	E Sunset Way				E Sunset Way				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	2		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	2		
5:15 PM	3	0	0		0	0	0		0	0	0		0	0	0		3	4		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	4		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	3		
Count Total	3	2	0		0	0	0		0	0	0		0	0	0		5	0		
Peak Hour	3	1	0		0	0	0		0	0	0		0	0	0		4	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

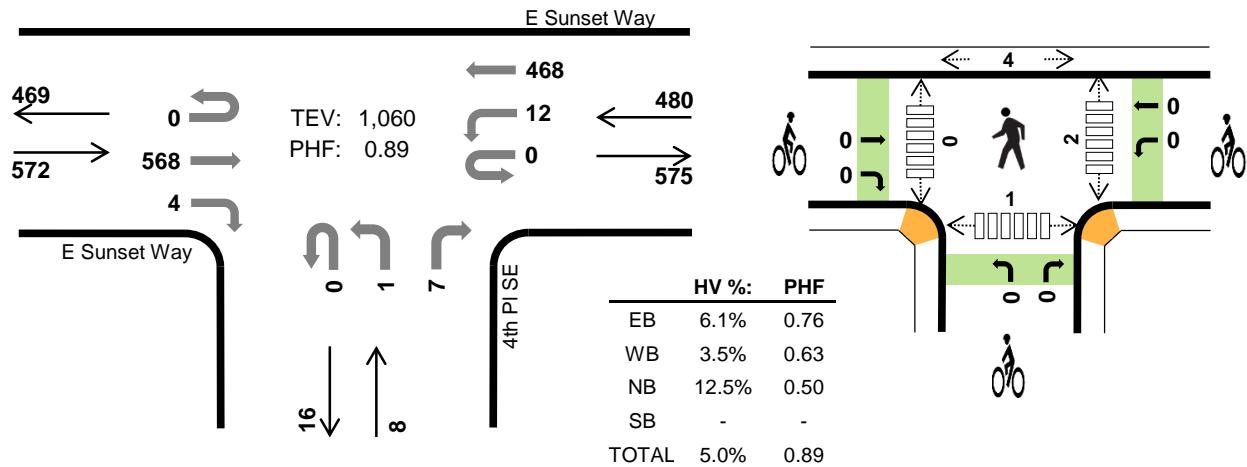
4th PI SE E Sunset Way


Peak Hour

Date: 04/05/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:15 AM to 8:15 AM


Two-Hour Count Summaries

Interval Start	E Sunset Way				E Sunset Way				4th PI SE				0				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	111	0	0	0	78	0	0	0	0	1	0	0	0	0	190	0
7:15 AM	0	0	104	0	0	1	191	0	0	0	0	2	0	0	0	0	298	0
7:30 AM	0	0	130	2	0	5	89	0	0	1	0	3	0	0	0	0	230	0
7:45 AM	0	0	147	2	0	4	107	0	0	0	0	2	0	0	0	0	262	980
8:00 AM	0	0	187	0	0	2	81	0	0	0	0	0	0	0	0	0	270	1,060
8:15 AM	0	0	164	0	0	1	90	0	0	0	0	2	0	0	0	0	257	1,019
8:30 AM	0	0	131	0	0	2	82	0	0	0	0	0	0	0	0	0	215	1,004
8:45 AM	0	0	146	0	0	0	134	0	0	0	0	3	0	0	0	0	283	1,025
Count Total	0	0	1,120	4	0	15	852	0	0	1	0	13	0	0	0	0	2,005	0
Peak Hour	All	0	0	568	4	0	12	468	0	0	1	0	7	0	0	0	1,060	0
	HV	0	0	34	1	0	0	17	0	0	0	1	0	0	0	0	53	0
	HV%	-	-	6%	25%	-	0%	4%	-	-	0%	-	14%	-	-	-	5%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	19	1	0	0	20	0	0	0	0	0	0	0	0	0	0
7:15 AM	9	7	0	0	16	0	0	0	0	0	1	0	3	0	4
7:30 AM	7	1	1	0	9	0	0	0	0	0	0	0	0	1	1
7:45 AM	8	3	0	0	11	0	0	0	0	0	1	0	1	0	2
8:00 AM	11	6	0	0	17	0	0	0	0	0	0	0	0	0	0
8:15 AM	12	4	1	0	17	0	0	0	0	0	0	0	1	0	1
8:30 AM	11	6	0	0	17	0	0	0	0	0	0	0	1	0	1
8:45 AM	9	6	0	0	15	0	0	0	0	0	0	0	0	0	0
Count Total	86	34	2	0	122	0	0	0	0	0	2	0	6	1	9
Peak Hr	35	17	1	0	53	0	0	0	0	0	2	0	4	1	7

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	E Sunset Way				E Sunset Way				4th Pl SE				0				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	19	0	0	0	1	0	0	0	0	0	0	0	0	0	20	0		
7:15 AM	0	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	16	0		
7:30 AM	0	0	6	1	0	0	1	0	0	0	0	1	0	0	0	0	9	0		
7:45 AM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11	56		
8:00 AM	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	0	17	53		
8:15 AM	0	0	12	0	0	0	4	0	0	0	0	1	0	0	0	0	17	54		
8:30 AM	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	0	17	62		
8:45 AM	0	0	9	0	0	0	6	0	0	0	0	0	0	0	0	0	15	66		
Count Total	0	0	85	1	0	0	34	0	0	0	0	2	0	0	0	0	122	0		
Peak Hour	0	0	34	1	0	0	17	0	0	0	0	1	0	0	0	0	53	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	E Sunset Way				E Sunset Way				4th Pl SE				0				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																				

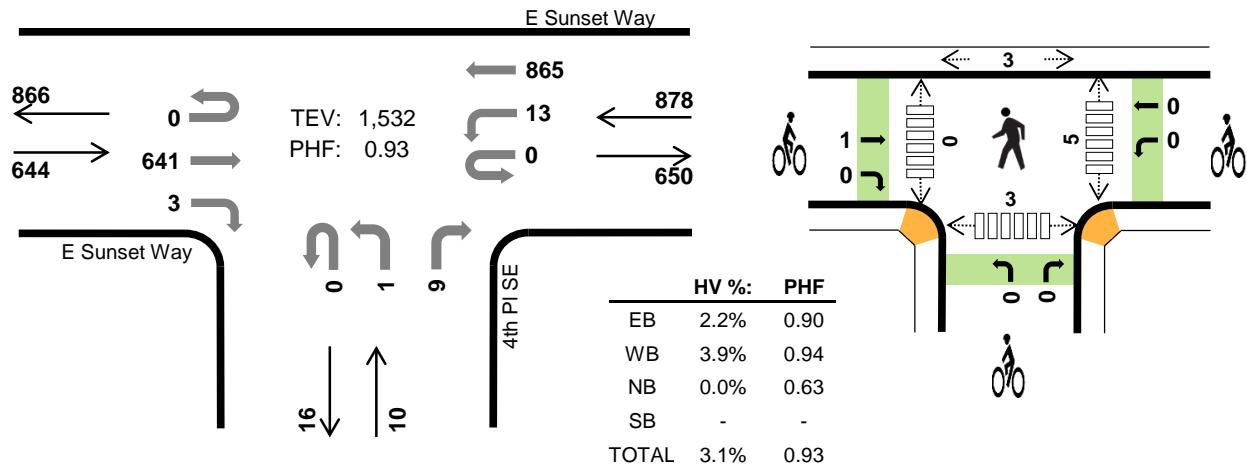
4th PI SE E Sunset Way


Peak Hour

Date: 04/05/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:30 PM to 5:30 PM


Two-Hour Count Summaries

Interval Start	E Sunset Way				E Sunset Way				4th PI SE				0				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	181	1	0	0	201	0	0	0	0	2	0	0	0	0	385	0		
4:15 PM	0	0	183	0	0	5	176	0	0	0	0	1	0	0	0	0	365	0		
4:30 PM	0	0	157	0	0	2	202	0	0	0	0	1	0	0	0	0	362	0		
4:45 PM	0	0	131	1	0	2	217	0	0	0	0	3	0	0	0	0	354	1,466		
5:00 PM	0	0	177	2	0	4	217	0	0	0	0	4	0	0	0	0	404	1,485		
5:15 PM	0	0	176	0	0	5	229	0	0	1	0	1	0	0	0	0	412	1,532		
5:30 PM	0	0	158	1	0	0	173	0	0	0	0	4	0	0	0	0	336	1,506		
5:45 PM	0	0	180	2	0	6	191	0	0	0	0	1	0	0	0	0	380	1,532		
Count Total	0	0	1,343	7	0	24	1,606	0	0	1	0	17	0	0	0	0	2,998	0		
Peak Hour	All	0	0	641	3	0	13	865	0	0	1	0	9	0	0	0	1,532	0		
	HV	0	0	14	0	0	0	34	0	0	0	0	0	0	0	0	48	0		
	HV%	-	-	2%	0%	-	0%	4%	-	-	0%	-	0%	-	-	-	3%	0		

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

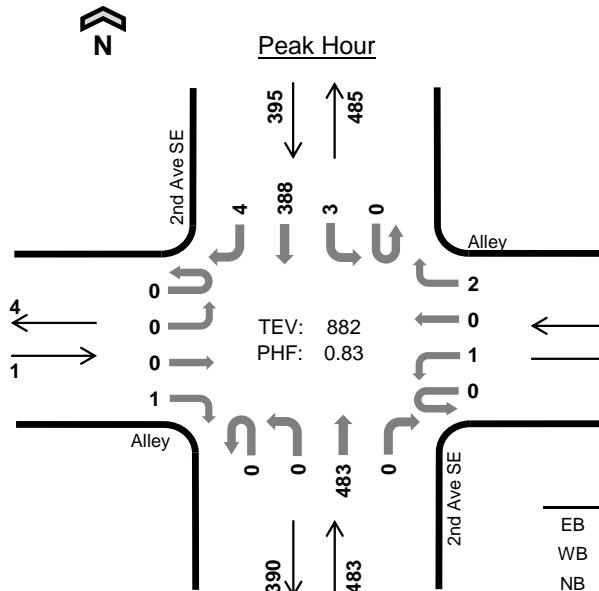
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	11	0	0	15	0	1	0	0	1	1	0	1	3	5
4:15 PM	9	14	0	0	23	0	0	0	0	0	0	0	2	1	3
4:30 PM	5	10	0	0	15	0	0	0	0	0	2	0	1	3	6
4:45 PM	2	8	0	0	10	1	0	0	0	1	1	0	1	0	2
5:00 PM	4	11	0	0	15	0	0	0	0	0	1	0	1	0	2
5:15 PM	3	5	0	0	8	0	0	0	0	0	1	0	0	0	1
5:30 PM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
5:45 PM	2	1	0	0	3	0	1	0	0	1	1	0	2	1	4
Count Total	31	63	0	0	94	1	2	0	0	3	7	0	8	8	23
Peak Hr	14	34	0	0	48	1	0	0	0	1	5	0	3	3	11

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	E Sunset Way				E Sunset Way				4th Pl SE				0				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	15	0		
4:15 PM	0	0	9	0	0	0	14	0	0	0	0	0	0	0	0	0	23	0		
4:30 PM	0	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	15	0		
4:45 PM	0	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	10	63		
5:00 PM	0	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	15	63		
5:15 PM	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	48		
5:30 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	38		
5:45 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	31		
Count Total	0	0	31	0	0	0	63	0	0	0	0	0	0	0	0	0	94	0		
Peak Hour	0	0	14	0	0	0	34	0	0	0	0	0	0	0	0	0	48	0		

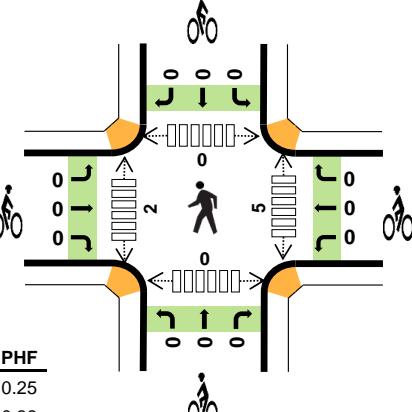
Two-Hour Count Summaries - Bikes																				
Interval Start	E Sunset Way				E Sunset Way				4th Pl SE				0				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	1	0		0	0	0		0	0	0		1	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	1	0		0	0	0		0	0	0		0	0	0		1	2		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	1		
5:45 PM	0	0	0		0	1	0		0	0	0		0	0	0		1	1		
Count Total	0	1	0		0	2	0		0	0	0		0	0	0		3	0		
Peak Hour	0	1	0		0	0	0		0	0	0		0	0	0		1	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

2nd Ave SE Alley



Date: 04/05/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV %:	PHF
EB	0.0%	0.25
WB	0.0%	0.38
NB	6.2%	0.73
SB	4.1%	0.57
TOTAL	5.2%	0.83

Two-Hour Count Summaries

Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	87	0	0	0	61	0	149	0
7:15 AM	0	0	0	1	0	1	0	0	0	0	90	0	0	0	174	0	266	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	98	0	0	0	109	1	210	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	129	0	0	3	49	1	182	807
8:00 AM	0	0	0	0	0	0	0	0	0	0	166	0	0	0	56	2	224	882
8:15 AM	0	0	0	0	0	0	0	0	0	0	161	1	0	0	40	0	202	818
8:30 AM	0	0	0	0	0	0	0	0	0	0	102	0	0	0	36	0	138	746
8:45 AM	0	1	0	0	0	0	0	0	0	0	111	0	0	0	66	0	178	742
Count Total	0	1	0	1	0	1	0	3	0	0	944	1	0	3	591	4	1,549	0
Peak Hour	All	0	0	0	1	0	1	2	0	0	483	0	0	3	388	4	882	0
	HV	0	0	0	0	0	0	0	0	0	30	0	0	0	16	0	46	0
	HV%	-	-	-	0%	-	0%	-	0%	-	6%	-	-	0%	4%	0%	5%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	9	5	14	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	5	4	9	0	0	0	0	0	3	0	0	0	3
7:45 AM	0	0	8	2	10	0	0	0	0	0	2	0	0	0	2
8:00 AM	0	0	8	5	13	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	11	1	12	0	0	0	0	0	0	2	0	0	2
8:30 AM	0	0	11	3	14	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	79	23	102	0	0	0	0	0	5	4	0	0	9
Peak Hour	0	0	30	16	46	0	0	0	0	0	5	2	0	0	7

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
7:00 AM	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	0		
7:15 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	0		
7:30 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9	0		
7:45 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	0	10	53		
8:00 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	5	0	13	46		
8:15 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	0	12	44		
8:30 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	3	0	14	49		
8:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	49		
Count Total	0	0	0	0	0	0	0	0	0	0	79	0	0	0	23	0	102	0		
Peak Hour	0	0	0	0	0	0	0	0	0	0	30	0	0	0	16	0	46	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

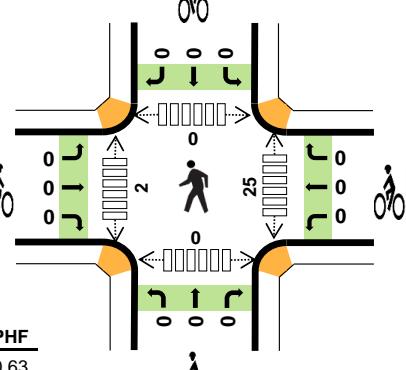
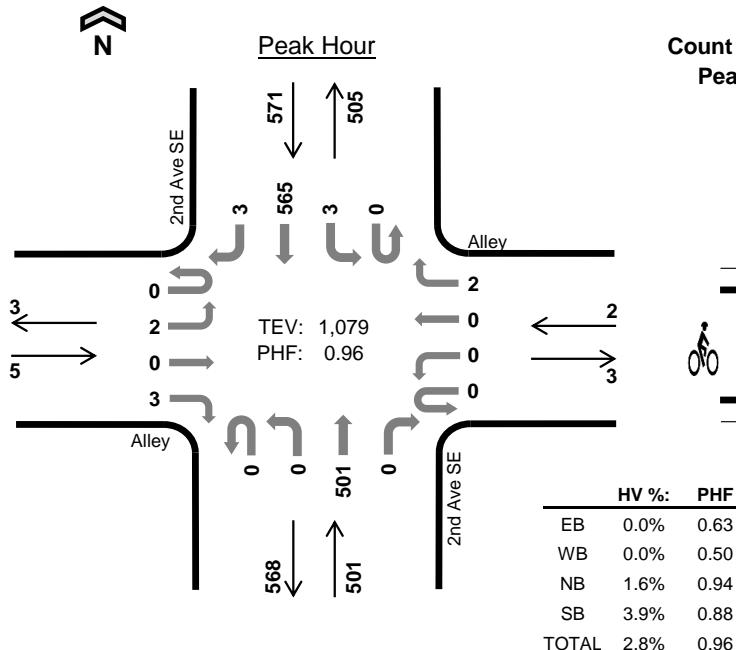
2nd Ave SE Alley



Date: 04/05/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

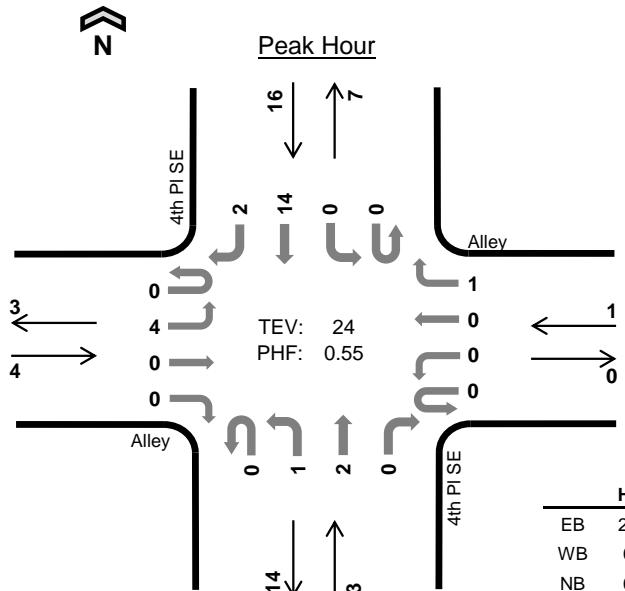
Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	0	1	0	0	0	0	0	0	136	0	0	0	150	0	287	0	
4:15 PM	0	0	0	1	0	0	0	0	0	0	136	0	0	0	137	0	274	0	
4:30 PM	0	1	0	2	0	0	0	0	0	0	113	0	0	0	150	1	267	0	
4:45 PM	0	1	0	0	0	0	0	0	0	0	76	2	0	0	142	1	222	1,050	
5:00 PM	0	0	118	0	0	0	161	1	280	1,043									
5:15 PM	0	1	0	1	0	0	0	1	0	0	119	0	0	1	154	1	278	1,047	
5:30 PM	0	1	0	1	0	0	0	0	0	0	133	0	0	1	127	1	264	1,044	
5:45 PM	0	0	0	1	0	0	0	1	0	0	131	0	0	1	123	0	257	1,079	
Count Total	0	4	0	7	0	0	0	2	0	0	962	2	0	3	1,144	5	2,129	0	
Peak Hour	All	0	2	0	3	0	0	0	2	0	0	501	0	0	3	565	3	1,079	0
	HV	0	0	0	0	0	0	0	0	0	0	8	0	0	0	22	0	30	0
	HV%	-	0%	-	0%	-	-	-	0%	-	-	2%	-	-	0%	4%	0%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

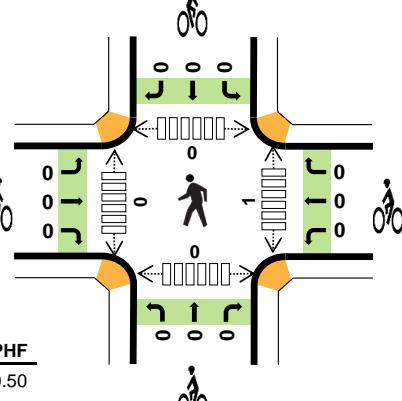
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	2	10	12	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	7	16	23	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	5	13	18	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	2	8	10	0	0	0	0	0	2	0	0	0	2
5:00 PM	0	0	3	12	15	0	0	0	0	0	20	0	0	0	20
5:15 PM	0	0	2	7	9	0	0	0	0	0	1	1	0	0	2
5:30 PM	0	0	1	2	3	0	0	0	0	0	4	0	0	0	4
5:45 PM	0	0	2	1	3	0	0	0	0	0	0	1	0	0	1
Count Total	0	0	24	69	93	0	0	0	0	0	27	5	0	0	32
Peak Hour	0	0	8	22	30	0	0	0	0	0	25	2	0	0	27

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	10	0	12	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	16	0	23	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	13	0	18	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	8	0	10	63		
5:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	12	0	15	66		
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	9	52		
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	37		
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	30		
Count Total	0	0	0	0	0	0	0	0	0	0	24	0	0	0	69	0	93	0		
Peak Hour	0	0	0	0	0	0	0	0	0	0	8	0	0	0	22	0	30	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Alley				Alley				2nd Ave SE				2nd Ave SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																				

4th PI SE Alley



Date: 04/05/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



Two-Hour Count Summaries

Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0
7:30 AM	0	2	0	0	0	0	0	0	0	1	1	0	0	0	6	1	11	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	6	0	8	23
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	24
8:15 AM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	24
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	15
8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10
Count Total	0	9	0	0	0	0	0	1	0	1	3	0	0	0	16	3	33	0
Peak Hour	All	0	4	0	0	0	0	0	0	1	2	0	0	0	14	2	24	0
	HV	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
	HV%	-	25%	-	-	-	-	0%	-	0%	0%	-	-	-	0%	50%	8%	0

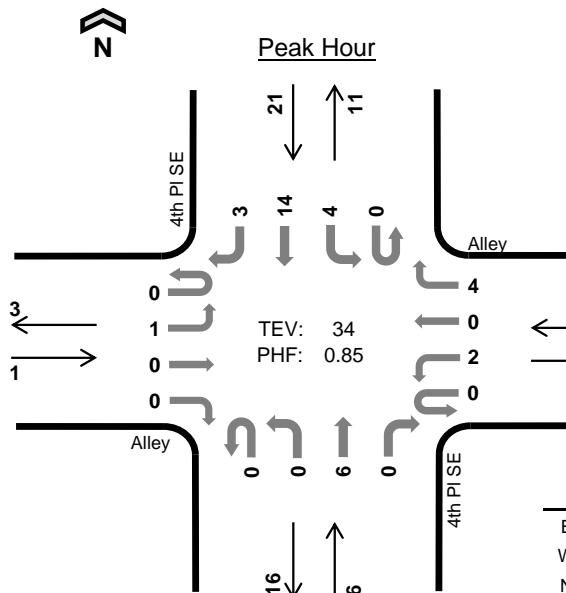
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:30 AM	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	1	0	1	1	3	0	0	0	0	0	1	1	0	1	3
Peak Hour	1	0	0	1	2	0	0	0	0	0	1	0	0	0	1

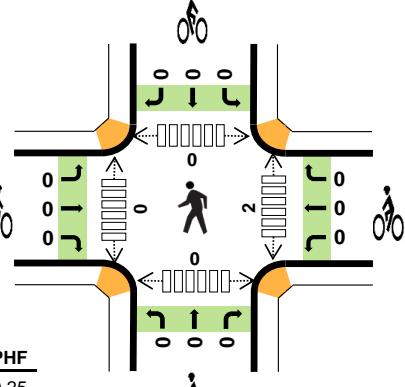
Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	
Two-Hour Count Summaries - Bikes																		
Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT			
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

4th PI SE Alley



Date: 04/05/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



HV %:	PHF
EB	0.0% 0.25
WB	0.0% 0.50
NB	0.0% 0.50
SB	0.0% 0.66
TOTAL	0.0% 0.85

Two-Hour Count Summaries

Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	3	0	
4:15 PM	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	4	0	7	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	3	0	7	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	6	23
5:00 PM	0	2	0	0	2	0	0	0	5	1	10	30							
5:15 PM	0	0	0	0	0	2	0	1	0	0	0	1	0	0	1	3	1	9	32
5:30 PM	0	1	0	0	0	0	0	1	0	0	0	3	0	0	2	0	0	7	32
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	1	8	34
Count Total	0	4	0	1	0	3	0	6	0	2	9	0	0	4	25	3	57	0	
Peak Hour	All	0	1	0	0	0	2	0	4	0	0	6	0	0	4	14	3	34	0
HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HV%	-	0%	-	-	-	0%	-	0%	-	-	0%	-	-	0%	0%	0%	0%	0%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Peak Hour	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2

Two-Hour Count Summaries - Heavy Vehicles																				
Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Two-Hour Count Summaries - Bikes																				
Interval Start	Alley				Alley				4th PI SE				4th PI SE				15-min Total	Rolling One Hour		
	Eastbound				Westbound				Northbound				Southbound							
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT					
4:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
4:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:00 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:15 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:30 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
5:45 PM	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0		
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																				

Appendix B

Trip Generation Calculations

Bright Stars Family Daycare
Trip Generation Estimate

Trip Generation Estimate

Land Use	Size	Units	ITE LUC ¹	Trip Rate or Equation	Directional Split		Vehicle Trip Generation						
					Enter	Exit	Enter	Exit	Total				
Daily													
<u>Proposed Use:</u>													
Daycare	59	Students	565	4.09	50%	50%	121	120	241				
Pass-by	44%						-53	-53	-106				
Diverted Link Trips	32%						-39	-38	-77				
NET DAILY TRIP GENERATION =							29	29	58				
AM Peak Hour													
<u>Proposed Use:</u>													
Daycare	59	Students	565	$T = 0.66(X) + 8.42$	53%	47%	25	22	47				
Pass-by	44%						-11	-10	-21				
Diverted Link Trips	32%						-8	-7	-15				
NET AM PEAK HOUR TRIP GENERATION =							6	5	11				
PM Peak Hour													
<u>Proposed Use:</u>													
Daycare	59	Students	565	$\ln(T) = 0.87 \ln(X) + 0.29$	47%	53%	22	24	46				
Pass-by	44%						-9	-11	-20				
Diverted Link Trips	32%						-7	-8	-15				
NET PM PEAK HOUR TRIP GENERATION =							6	5	11				

¹ Land Use Code from ITE 11th Edition Trip Generation Manual, 2021.

Appendix C

Level of Service (LOS) Calculations

2022 Existing

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	13	175	61	289	167	9	107	1	379	24	34	23
Future Volume (vph)	13	175	61	289	167	9	107	1	379	24	34	23
Confl. Peds. (#/hr)	3		1	1		3			15	15		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	3%	8%	4%	4%	11%	3%	0%	7%	4%	3%	0%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2			1	6		3	8		7	4
Permitted Phases	2			2	6			8			4	
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

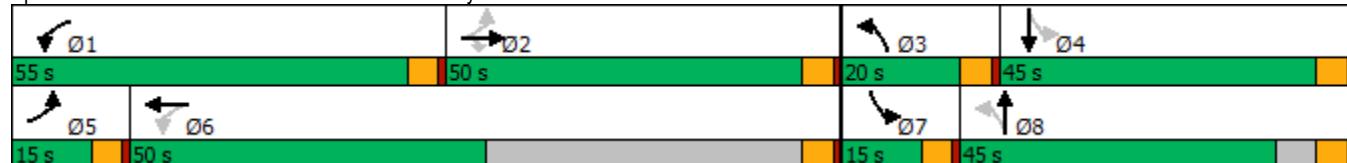
Cycle Length: 170

Actuated Cycle Length: 60

Natural Cycle: 85

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way



HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↗ ↙	↖ ↗	↖ ↘	↑ ↗	↖ ↙	↖ ↘	↑ ↗	↖ ↙	↖ ↘	↑ ↗
Traffic Volume (veh/h)	13	175	61	289	167	9	107	1	379	24	34	23
Future Volume (veh/h)	13	175	61	289	167	9	107	1	379	24	34	23
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00			1.00	0.98		0.98	0.99	0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No				No			No		No
Adj Sat Flow, veh/h/ln	1781	1856	1781	1841	1841	1737	1856	1900	1796	1841	1856	1900
Adj Flow Rate, veh/h	14	184	64	304	176	9	113	1	399	25	36	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	3	8	4	4	11	3	0	7	4	3	0
Cap, veh/h	322	285	230	490	538	28	563	1	494	246	280	187
Arrive On Green	0.02	0.15	0.15	0.17	0.31	0.31	0.07	0.31	0.31	0.03	0.27	0.27
Sat Flow, veh/h	1697	1856	1495	1753	1735	89	1767	4	1569	1753	1026	684
Grp Volume(v), veh/h	14	184	64	304	0	185	113	0	400	25	0	60
Grp Sat Flow(s), veh/h/ln	1697	1856	1495	1753	0	1824	1767	0	1572	1753	0	1710
Q Serve(g_s), s	0.4	5.7	2.3	8.1	0.0	4.7	2.7	0.0	14.2	0.6	0.0	1.6
Cycle Q Clear(g_c), s	0.4	5.7	2.3	8.1	0.0	4.7	2.7	0.0	14.2	0.6	0.0	1.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	322	285	230	490	0	566	563	0	495	246	0	467
V/C Ratio(X)	0.04	0.64	0.28	0.62	0.00	0.33	0.20	0.00	0.81	0.10	0.00	0.13
Avail Cap(c_a), veh/h	572	1375	1108	1630	0	1352	876	0	1036	485	0	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	24.1	22.7	15.7	0.0	16.1	14.0	0.0	19.1	16.2	0.0	16.6
Incr Delay (d2), s/veh	0.0	0.9	0.2	0.5	0.0	0.1	0.1	0.0	1.2	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.4	0.8	3.0	0.0	1.9	1.0	0.0	4.9	0.2	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.0	25.0	22.9	16.2	0.0	16.2	14.1	0.0	20.3	16.3	0.0	16.7
LnGrp LOS	C	C	C	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h		262			489			513			85	
Approach Delay, s/veh		24.3			16.2			19.0			16.6	
Approach LOS		C			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.5	14.3	9.3	21.6	6.1	23.8	6.7	24.1				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	10.1	7.7	4.7	3.6	2.4	6.7	2.6	16.2				
Green Ext Time (p_c), s	0.5	0.9	0.1	0.2	0.0	0.8	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.8									
HCM 6th LOS			B									



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (vph)	568	4	12	468	1	7
Future Volume (vph)	568	4	12	468	1	7
Confl. Peds. (#/hr)		1	1			2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	25%	0%	4%	0%	14%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	4	12	468	1	7
Traffic Vol, veh/h	568	4	12	468	1	7
Future Vol, veh/h	568	4	12	468	1	7
Conflicting Peds, #/hr	0	1	1	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	25	0	4	0	14
Mvmt Flow	638	4	13	526	1	8

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	643	0	1193 643
Stage 1	-	-	-	-	641 -
Stage 2	-	-	-	-	552 -
Critical Hdwy	-	-	4.1	-	6.4 6.34
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.426
Pot Cap-1 Maneuver	-	-	951	-	208 453
Stage 1	-	-	-	-	528 -
Stage 2	-	-	-	-	581 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	950	-	204 452
Mov Cap-2 Maneuver	-	-	-	-	204 -
Stage 1	-	-	-	-	527 -
Stage 2	-	-	-	-	570 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	392	-	-	950	-
HCM Lane V/C Ratio	0.023	-	-	0.014	-
HCM Control Delay (s)	14.4	-	-	8.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	1	0	2	0	483	0	3	388	4
Future Volume (vph)	0	0	1	1	0	2	0	483	0	3	388	4
Confl. Peds. (#/hr)							2		5	5		2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop				Free			Free	
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑		↑↑	↑↑	↑↑		↑↑	↑↑	
Traffic Vol, veh/h	0	0	1	1	0	2	0	483	0	3	388	4
Future Vol, veh/h	0	0	1	1	0	2	0	483	0	3	388	4
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	5	5	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	6	0	0	4	0
Mvmt Flow	0	0	1	1	0	2	0	582	0	4	467	5
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1063	1067	472	1065	1069	587	474	0	0	587	0	0
Stage 1	480	480	-	587	587	-	-	-	-	-	-	-
Stage 2	583	587	-	478	482	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	203	224	596	202	223	513	1099	-	-	998	-	-
Stage 1	571	558	-	499	500	-	-	-	-	-	-	-
Stage 2	502	500	-	572	557	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	201	221	595	200	220	511	1097	-	-	993	-	-
Mov Cap-2 Maneuver	201	221	-	200	220	-	-	-	-	-	-	-
Stage 1	570	554	-	497	498	-	-	-	-	-	-	-
Stage 2	500	498	-	568	553	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	11.1		15.8			0			0.1			
HCM LOS	B		C									
Minor Lane/Major Mvmt												
Capacity (veh/h)	1097	-	-	595	337	993	-	-				
HCM Lane V/C Ratio	-	-	-	0.002	0.011	0.004	-	-				
HCM Control Delay (s)	0	-	-	11.1	15.8	8.6	0	-				
HCM Lane LOS	A	-	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	0	0	0	1	1	2	0	0	14	2
Future Volume (vph)	4	0	0	0	0	1	1	2	0	0	14	2
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Shared Lane Traffic (%)												
Sign Control	Stop				Stop				Free			Free
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh		2.1										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	+	+	+	+	+	+	+	+	+	+	+	+
Traffic Vol, veh/h	4	0	0	0	0	1	1	2	0	0	14	2
Future Vol, veh/h	4	0	0	0	0	1	1	2	0	0	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	25	0	0	0	0	0	0	0	0	0	0	50
Mvmt Flow	7	0	0	0	0	2	2	4	0	0	25	4
Major/Minor		Minor2		Minor1		Major1		Major2				
Conflicting Flow All	36	36	27	36	38	5	29	0	0	5	0	0
Stage 1	27	27	-	9	9	-	-	-	-	-	-	-
Stage 2	9	9	-	27	29	-	-	-	-	-	-	-
Critical Hdwy	7.35	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.725	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	915	860	1054	975	858	1084	1597	-	-	1630	-	-
Stage 1	934	877	-	1017	892	-	-	-	-	-	-	-
Stage 2	956	892	-	996	875	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	913	858	1054	973	856	1083	1597	-	-	1628	-	-
Mov Cap-2 Maneuver	913	858	-	973	856	-	-	-	-	-	-	-
Stage 1	933	877	-	1015	890	-	-	-	-	-	-	-
Stage 2	953	890	-	996	875	-	-	-	-	-	-	-
Approach		EB		WB		NB		SB				
HCM Control Delay, s				9		8.3		2.4		0		
HCM LOS	A				A							
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1597	-	-	913	1083	1628	-	-	-			
HCM Lane V/C Ratio	0.001	-	-	0.008	0.002	-	-	-	-			
HCM Control Delay (s)	7.3	0	-	9	8.3	0	-	-	-			
HCM Lane LOS	A	A	-	A	A	A	-	-	-			
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-	-			

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	29	273	67	539	322	15	81	11	339	23	14	21
Future Volume (vph)	29	273	67	539	322	15	81	11	339	23	14	21
Confl. Peds. (#/hr)	3		1	1		3	2		34	34		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	1%	6%	7%	2%	0%	1%	9%	3%	0%	0%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

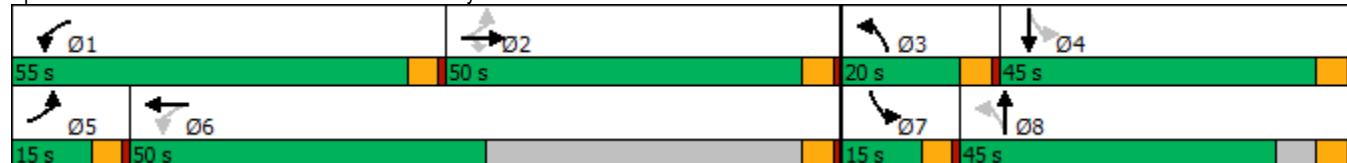
Cycle Length: 170

Actuated Cycle Length: 89.6

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way

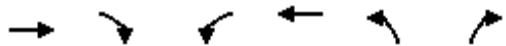


HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↗ ↙	↖ ↗	↑ ↗	↖ ↙	↑ ↗	↑ ↙	↑ ↗	↖ ↗	↖ ↙	↖ ↗
Traffic Volume (veh/h)	29	273	67	539	322	15	81	11	339	23	14	21
Future Volume (veh/h)	29	273	67	539	322	15	81	11	339	23	14	21
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.94		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1856	1885	1811	1796	1870	1900	1885	1767	1856	1900	1900	1826
Adj Flow Rate, veh/h	30	284	70	561	335	16	84	11	353	24	15	22
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	1	6	7	2	0	1	9	3	0	0	5
Cap, veh/h	321	353	285	602	777	37	487	12	394	166	175	256
Arrive On Green	0.03	0.19	0.19	0.28	0.44	0.44	0.05	0.29	0.29	0.02	0.26	0.26
Sat Flow, veh/h	1767	1885	1523	1711	1770	85	1795	43	1374	1810	667	978
Grp Volume(v), veh/h	30	284	70	561	0	351	84	0	364	24	0	37
Grp Sat Flow(s), veh/h/ln	1767	1885	1523	1711	0	1855	1795	0	1417	1810	0	1644
Q Serve(g_s), s	1.2	13.1	3.6	22.6	0.0	11.9	3.1	0.0	22.4	0.9	0.0	1.5
Cycle Q Clear(g_c), s	1.2	13.1	3.6	22.6	0.0	11.9	3.1	0.0	22.4	0.9	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.97	1.00		0.59
Lane Grp Cap(c), veh/h	321	353	285	602	0	815	487	0	407	166	0	431
V/C Ratio(X)	0.09	0.80	0.25	0.93	0.00	0.43	0.17	0.00	0.90	0.14	0.00	0.09
Avail Cap(c_a), veh/h	464	932	753	1061	0	917	694	0	623	319	0	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.4	35.4	31.5	19.4	0.0	17.7	22.6	0.0	31.1	25.7	0.0	25.3
Incr Delay (d2), s/veh	0.0	1.6	0.2	4.7	0.0	0.1	0.1	0.0	7.7	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.5	6.1	1.3	9.3	0.0	5.0	1.3	0.0	8.4	0.4	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	37.0	31.7	24.1	0.0	17.8	22.7	0.0	38.8	25.9	0.0	25.4
LnGrp LOS	C	D	C	C	A	B	C	A	D	C	A	C
Approach Vol, veh/h						912			448			61
Approach Delay, s/veh						21.7			35.8			25.6
Approach LOS						C			D			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.6	22.1	9.5	28.9	7.7	45.0	7.3	31.1				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	24.6	15.1	5.1	3.5	3.2	13.9	2.9	24.4				
Green Ext Time (p_c), s	0.9	1.3	0.1	0.1	0.0	1.5	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay				28.2								
HCM 6th LOS				C								



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑ ↗			↑ ↘	↗ ↖	
Traffic Volume (vph)	641	3	13	865	1	9
Future Volume (vph)	641	3	13	865	1	9
Confl. Peds. (#/hr)		3	3			5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	4%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	Y	
Traffic Vol, veh/h	641	3	13	865	1	9
Future Vol, veh/h	641	3	13	865	1	9
Conflicting Peds, #/hr	0	3	3	0	0	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	0	4	0	0
Mvmt Flow	689	3	14	930	1	10

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	695	0	1652
Stage 1	-	-	-	-	694
Stage 2	-	-	-	-	958
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	910	-	110
Stage 1	-	-	-	-	499
Stage 2	-	-	-	-	376
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	907	-	106
Mov Cap-2 Maneuver	-	-	-	-	440
Stage 1	-	-	-	-	106
Stage 2	-	-	-	-	364

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	335	-	-	907	-
HCM Lane V/C Ratio	0.032	-	-	0.015	-
HCM Control Delay (s)	16.1	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	3	0	0	2	0	501	0	3	565	3
Future Volume (vph)	2	0	3	0	0	2	0	501	0	3	565	3
Confl. Peds. (#/hr)							2		25	25		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop				Free			Free	
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑		↑↑	↑↑	↑↑		↑↑	↑↑	↑↑
Traffic Vol, veh/h	2	0	3	0	0	2	0	501	0	3	565	3
Future Vol, veh/h	2	0	3	0	0	2	0	501	0	3	565	3
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	25	25	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	4	0
Mvmt Flow	2	0	3	0	0	2	0	522	0	3	589	3
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1122	1146	593	1145	1147	547	594	0	0	547	0	0
Stage 1	599	599	-	547	547	-	-	-	-	-	-	-
Stage 2	523	547	-	598	600	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	185	201	509	178	201	541	992	-	-	1033	-	-
Stage 1	492	494	-	525	521	-	-	-	-	-	-	-
Stage 2	541	521	-	492	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	183	195	508	172	195	528	990	-	-	1008	-	-
Mov Cap-2 Maneuver	183	195	-	172	195	-	-	-	-	-	-	-
Stage 1	491	491	-	512	508	-	-	-	-	-	-	-
Stage 2	539	508	-	487	490	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	17.3		11.8			0			0			
HCM LOS	C		B									
Minor Lane/Major Mvmt												
Capacity (veh/h)	990	-	-	297	528	1008	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	0.018	0.004	0.003	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	17.3	11.8	8.6	0	-	-	-	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-	-	-	-	-

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	2	0	4	0	6	0	4	14	3
Future Volume (vph)	1	0	0	2	0	4	0	6	0	4	14	3
Confl. Peds. (#/hr)									2	2		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control	Stop				Stop				Free			Free
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Vol, veh/h	1	0	0	2	0	4	0	6	0	4	14	3
Future Vol, veh/h	1	0	0	2	0	4	0	6	0	4	14	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	0	2	0	5	0	7	0	5	16	4
Major/Minor		Minor2		Minor1		Major1		Major2				
Conflicting Flow All	38	37	18	37	39	9	20	0	0	9	0	0
Stage 1	28	28	-	9	9	-	-	-	-	-	-	-
Stage 2	10	9	-	28	30	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	972	859	1066	973	857	1079	1609	-	-	1624	-	-
Stage 1	994	876	-	1017	892	-	-	-	-	-	-	-
Stage 2	1016	892	-	994	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	965	855	1066	969	853	1077	1609	-	-	1621	-	-
Mov Cap-2 Maneuver	965	855	-	969	853	-	-	-	-	-	-	-
Stage 1	994	873	-	1015	890	-	-	-	-	-	-	-
Stage 2	1012	890	-	991	871	-	-	-	-	-	-	-
Approach		EB		WB		NB		SB				
HCM Control Delay, s	8.7			8.5			0			1.4		
HCM LOS	A			A								
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1609	-	-	965	1038	1621	-	-				
HCM Lane V/C Ratio	-	-	-	0.001	0.007	0.003	-	-				
HCM Control Delay (s)	0	-	-	8.7	8.5	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

2024 No Action

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	14	182	63	301	174	9	111	1	394	25	35	24
Future Volume (vph)	14	182	63	301	174	9	111	1	394	25	35	24
Confl. Peds. (#/hr)	3		1	1		3			15	15		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	3%	8%	4%	4%	11%	3%	0%	7%	4%	3%	0%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2			1	6		3	8		7	4
Permitted Phases	2			2	6			8			4	
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

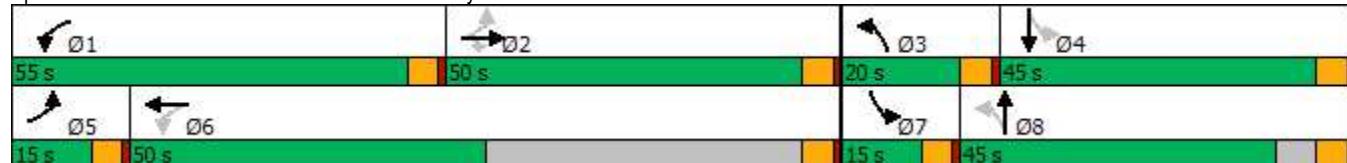
Cycle Length: 170

Actuated Cycle Length: 60.9

Natural Cycle: 85

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way



HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	2	3	4	5	6	7	8	9	10	11	12
Traffic Volume (veh/h)	14	182	63	301	174	9	111	1	394	25	35	24
Future Volume (veh/h)	14	182	63	301	174	9	111	1	394	25	35	24
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00			1.00	0.98		0.98	0.99	0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No				No			No		
Adj Sat Flow, veh/h/ln	1781	1856	1781	1841	1841	1737	1856	1900	1796	1841	1856	1900
Adj Flow Rate, veh/h	15	192	66	317	183	9	117	1	415	26	37	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	3	8	4	4	11	3	0	7	4	3	0
Cap, veh/h	321	290	234	492	551	27	563	1	501	235	285	192
Arrive On Green	0.02	0.16	0.16	0.18	0.32	0.32	0.07	0.32	0.32	0.03	0.28	0.28
Sat Flow, veh/h	1697	1856	1495	1753	1739	86	1767	4	1569	1753	1020	689
Grp Volume(v), veh/h	15	192	66	317	0	192	117	0	416	26	0	62
Grp Sat Flow(s), veh/h/ln	1697	1856	1495	1753	0	1825	1767	0	1573	1753	0	1709
Q Serve(g_s), s	0.5	6.1	2.5	8.8	0.0	5.1	2.9	0.0	15.4	0.7	0.0	1.7
Cycle Q Clear(g_c), s	0.5	6.1	2.5	8.8	0.0	5.1	2.9	0.0	15.4	0.7	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	321	290	234	492	0	578	563	0	502	235	0	477
V/C Ratio(X)	0.05	0.66	0.28	0.64	0.00	0.33	0.21	0.00	0.83	0.11	0.00	0.13
Avail Cap(c_a), veh/h	559	1323	1066	1568	0	1301	861	0	997	462	0	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	25.1	23.5	16.2	0.0	16.5	14.4	0.0	19.9	16.7	0.0	17.0
Incr Delay (d2), s/veh	0.0	1.0	0.2	0.5	0.0	0.1	0.1	0.0	1.4	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.7	0.9	3.3	0.0	2.0	1.1	0.0	5.4	0.3	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.7	26.0	23.7	16.7	0.0	16.6	14.4	0.0	21.2	16.8	0.0	17.1
LnGrp LOS	C	C	C	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h						509			533			88
Approach Delay, s/veh						16.7			19.8			17.0
Approach LOS					C	B			B			B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	14.9	9.4	22.6	6.2	25.0	6.8	25.1				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	10.8	8.1	4.9	3.7	2.5	7.1	2.7	17.4				
Green Ext Time (p_c), s	0.5	0.9	0.1	0.2	0.0	0.8	0.0	2.1				

Intersection Summary

HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (vph)	591	4	12	487	1	7
Future Volume (vph)	591	4	12	487	1	7
Confl. Peds. (#/hr)		1	1			2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	25%	0%	4%	0%	14%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	4	12	487	1	7
Traffic Vol, veh/h	591	4	12	487	1	7
Future Vol, veh/h	591	4	12	487	1	7
Conflicting Peds, #/hr	0	1	1	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	25	0	4	0	14
Mvmt Flow	664	4	13	547	1	8

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	669	0	1240
Stage 1	-	-	-	-	667
Stage 2	-	-	-	-	573
Critical Hdwy	-	-	4.1	-	6.4 6.34
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.426
Pot Cap-1 Maneuver	-	-	931	-	195 437
Stage 1	-	-	-	-	514 -
Stage 2	-	-	-	-	568 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	930	-	191 436
Mov Cap-2 Maneuver	-	-	-	-	191 -
Stage 1	-	-	-	-	513 -
Stage 2	-	-	-	-	557 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	376	-	-	930	-
HCM Lane V/C Ratio	0.024	-	-	0.014	-
HCM Control Delay (s)	14.8	-	-	8.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	1	0	2	0	503	0	3	404	4
Future Volume (vph)	0	0	1	1	0	2	0	503	0	3	404	4
Confl. Peds. (#/hr)							2		5	5		2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop				Free			Free	
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑		↑↑	↑↑	↑↑		↑↑	↑↑	
Traffic Vol, veh/h	0	0	1	1	0	2	0	503	0	3	404	4
Future Vol, veh/h	0	0	1	1	0	2	0	503	0	3	404	4
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	5	5	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	6	0	0	4	0
Mvmt Flow	0	0	1	1	0	2	0	606	0	4	487	5
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1107	1111	492	1109	1113	611	494	0	0	611	0	0
Stage 1	500	500	-	611	611	-	-	-	-	-	-	-
Stage 2	607	611	-	498	502	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	189	211	581	189	210	497	1080	-	-	978	-	-
Stage 1	557	546	-	484	487	-	-	-	-	-	-	-
Stage 2	487	487	-	558	545	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	187	208	580	187	207	495	1078	-	-	973	-	-
Mov Cap-2 Maneuver	187	208	-	187	207	-	-	-	-	-	-	-
Stage 1	556	542	-	482	485	-	-	-	-	-	-	-
Stage 2	485	485	-	553	541	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	11.2		16.4			0			0.1			
HCM LOS	B		C									
Minor Lane/Major Mvmt												
Capacity (veh/h)	1078	-	-	580	320	973	-	-				
HCM Lane V/C Ratio	-	-	-	0.002	0.011	0.004	-	-				
HCM Control Delay (s)	0	-	-	11.2	16.4	8.7	0	-				
HCM Lane LOS	A	-	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	0	0	0	1	1	2	0	0	15	2
Future Volume (vph)	4	0	0	0	0	1	1	2	0	0	15	2
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop			Free			Free		
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh		2.1										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	+	+	+	+	+	+	+	+	+	+	+	+
Traffic Vol, veh/h	4	0	0	0	0	1	1	2	0	0	15	2
Future Vol, veh/h	4	0	0	0	0	1	1	2	0	0	15	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	25	0	0	0	0	0	0	0	0	0	0	50
Mvmt Flow	7	0	0	0	0	2	2	4	0	0	27	4
Major/Minor		Minor2		Minor1		Major1		Major2				
Conflicting Flow All	38	38	29	38	40	5	31	0	0	5	0	0
Stage 1	29	29	-	9	9	-	-	-	-	-	-	-
Stage 2	9	9	-	29	31	-	-	-	-	-	-	-
Critical Hdwy	7.35	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.725	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	912	858	1052	972	856	1084	1595	-	-	1630	-	-
Stage 1	932	875	-	1017	892	-	-	-	-	-	-	-
Stage 2	956	892	-	993	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	910	856	1052	970	854	1083	1595	-	-	1628	-	-
Mov Cap-2 Maneuver	910	856	-	970	854	-	-	-	-	-	-	-
Stage 1	931	875	-	1015	890	-	-	-	-	-	-	-
Stage 2	953	890	-	993	873	-	-	-	-	-	-	-
Approach		EB		WB		NB		SB				
HCM Control Delay, s				9		8.3		2.4		0		
HCM LOS	A				A							
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1595	-	-	910	1083	1628	-	-	-			
HCM Lane V/C Ratio	0.001	-	-	0.008	0.002	-	-	-	-			
HCM Control Delay (s)	7.3	0	-	9	8.3	0	-	-	-			
HCM Lane LOS	A	A	-	A	A	A	-	-	-			
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-	-			

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	30	284	70	561	335	16	84	11	353	24	15	22
Future Volume (vph)	30	284	70	561	335	16	84	11	353	24	15	22
Confl. Peds. (#/hr)	3		1	1		3	2		34	34		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	1%	6%	7%	2%	0%	1%	9%	3%	0%	0%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

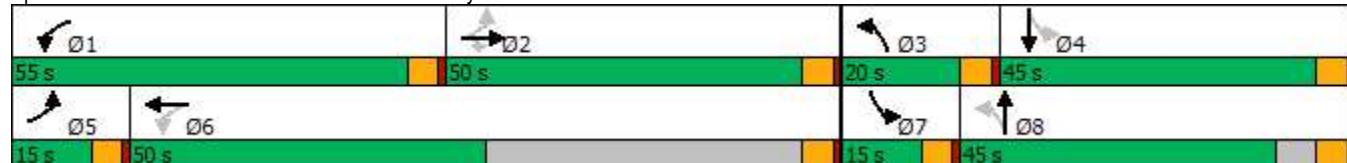
Cycle Length: 170

Actuated Cycle Length: 94.1

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way



HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↗ ↙	↖ ↗	↖ ↘	↑ ↗	↖ ↙	↖ ↘	↑ ↗	↖ ↙	↖ ↘	↑ ↗
Traffic Volume (veh/h)	30	284	70	561	335	16	84	11	353	24	15	22
Future Volume (veh/h)	30	284	70	561	335	16	84	11	353	24	15	22
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.94		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1856	1885	1811	1796	1870	1900	1885	1767	1856	1900	1900	1826
Adj Flow Rate, veh/h	31	296	73	584	349	17	88	11	368	25	16	23
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	1	6	7	2	0	1	9	3	0	0	5
Cap, veh/h	311	356	288	617	810	39	485	12	403	151	180	259
Arrive On Green	0.03	0.19	0.19	0.30	0.46	0.46	0.05	0.29	0.29	0.02	0.27	0.27
Sat Flow, veh/h	1767	1885	1523	1711	1768	86	1795	41	1377	1810	676	971
Grp Volume(v), veh/h	31	296	73	584	0	366	88	0	379	25	0	39
Grp Sat Flow(s), veh/h/ln	1767	1885	1523	1711	0	1855	1795	0	1418	1810	0	1647
Q Serve(g_s), s	1.4	15.4	4.2	27.5	0.0	13.6	3.6	0.0	26.4	1.0	0.0	1.8
Cycle Q Clear(g_c), s	1.4	15.4	4.2	27.5	0.0	13.6	3.6	0.0	26.4	1.0	0.0	1.8
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.97	1.00		0.59
Lane Grp Cap(c), veh/h	311	356	288	617	0	850	485	0	415	151	0	439
V/C Ratio(X)	0.10	0.83	0.25	0.95	0.00	0.43	0.18	0.00	0.91	0.17	0.00	0.09
Avail Cap(c_a), veh/h	433	830	670	944	0	850	657	0	555	283	0	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.8	39.9	35.3	22.9	0.0	18.7	25.1	0.0	34.9	28.8	0.0	28.2
Incr Delay (d2), s/veh	0.1	1.9	0.2	10.7	0.0	0.1	0.1	0.0	14.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.6	7.3	1.6	12.5	0.0	5.8	1.6	0.0	10.6	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.9	41.8	35.5	33.6	0.0	18.8	25.1	0.0	48.9	29.0	0.0	28.2
LnGrp LOS	C	D	D	C	A	B	C	A	D	C	A	C
Approach Vol, veh/h					950			467			64	
Approach Delay, s/veh					27.9			44.4			28.5	
Approach LOS					C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.5	24.3	10.2	32.3	7.9	51.8	7.5	34.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	29.5	17.4	5.6	3.8	3.4	15.6	3.0	28.4				
Green Ext Time (p_c), s	1.0	1.3	0.1	0.1	0.0	1.6	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay				34.6								
HCM 6th LOS				C								



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (vph)	667	3	14	900	1	9
Future Volume (vph)	667	3	14	900	1	9
Confl. Peds. (#/hr)		3	3			5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	4%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	3	14	900	1	9
Traffic Vol, veh/h	667	3	14	900	1	9
Future Vol, veh/h	667	3	14	900	1	9
Conflicting Peds, #/hr	0	3	3	0	0	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	0	4	0	0
Mvmt Flow	717	3	15	968	1	10

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	723	0	1720
Stage 1	-	-	-	-	722
Stage 2	-	-	-	-	998
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	889	-	100
Stage 1	-	-	-	-	485
Stage 2	-	-	-	-	360
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	886	-	96
Mov Cap-2 Maneuver	-	-	-	-	96
Stage 1	-	-	-	-	484
Stage 2	-	-	-	-	347

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	316	-	-	886	-
HCM Lane V/C Ratio	0.034	-	-	0.017	-
HCM Control Delay (s)	16.8	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	3	0	0	2	0	521	0	3	588	3
Future Volume (vph)	2	0	3	0	0	2	0	521	0	3	588	3
Confl. Peds. (#/hr)							2		25	25		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop				Free			Free	
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑		↑	↑		↑	↑	
Traffic Vol, veh/h	2	0	3	0	0	2	0	521	0	3	588	3
Future Vol, veh/h	2	0	3	0	0	2	0	521	0	3	588	3
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	25	25	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	4	0
Mvmt Flow	2	0	3	0	0	2	0	543	0	3	613	3
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1167	1191	617	1190	1192	568	618	0	0	568	0	0
Stage 1	623	623	-	568	568	-	-	-	-	-	-	-
Stage 2	544	568	-	622	624	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	172	189	494	166	189	526	972	-	-	1014	-	-
Stage 1	477	481	-	511	510	-	-	-	-	-	-	-
Stage 2	527	510	-	478	481	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	170	183	493	160	183	513	970	-	-	990	-	-
Mov Cap-2 Maneuver	170	183	-	160	183	-	-	-	-	-	-	-
Stage 1	476	478	-	499	498	-	-	-	-	-	-	-
Stage 2	525	498	-	473	478	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	18.1		12			0			0			
HCM LOS	C		B									
Minor Lane/Major Mvmt												
Capacity (veh/h)	970	-	-	280	513	990	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	0.019	0.004	0.003	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	18.1	12	8.6	0	-	-	-	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-	-	-	-	-

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	2	0	4	0	6	0	4	15	3
Future Volume (vph)	1	0	0	2	0	4	0	6	0	4	15	3
Confl. Peds. (#/hr)										2	2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control	Stop				Stop				Free			Free
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑			↑↑			↑↑		
Traffic Vol, veh/h	1	0	0	2	0	4	0	6	0	4	15	3
Future Vol, veh/h	1	0	0	2	0	4	0	6	0	4	15	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	0	2	0	5	0	7	0	5	18	4
Major/Minor		Minor2		Minor1		Major1		Major2				
Conflicting Flow All	40	39	20	39	41	9	22	0	0	9	0	0
Stage 1	30	30	-	9	9	-	-	-	-	-	-	-
Stage 2	10	9	-	30	32	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	969	857	1064	971	855	1079	1607	-	-	1624	-	-
Stage 1	992	874	-	1017	892	-	-	-	-	-	-	-
Stage 2	1016	892	-	992	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	962	853	1064	967	851	1077	1607	-	-	1621	-	-
Mov Cap-2 Maneuver	962	853	-	967	851	-	-	-	-	-	-	-
Stage 1	992	871	-	1015	890	-	-	-	-	-	-	-
Stage 2	1012	890	-	989	869	-	-	-	-	-	-	-
Approach		EB		WB		NB		SB				
HCM Control Delay, s		8.7			8.5			0			1.3	
HCM LOS	A			A			A			A		
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1607	-	-	962	1038	1621	-	-				
HCM Lane V/C Ratio	-	-	-	0.001	0.007	0.003	-	-				
HCM Control Delay (s)	0	-	-	8.7	8.5	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

2024 With Project

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	14	180	71	301	169	9	120	1	390	25	35	24
Future Volume (vph)	14	180	71	301	169	9	120	1	390	25	35	24
Confl. Peds. (#/hr)	3		1	1		3			15	15		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	3%	8%	4%	4%	11%	3%	0%	7%	4%	3%	0%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2			1	6		3	8		7	4
Permitted Phases	2			2	6			8			4	
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

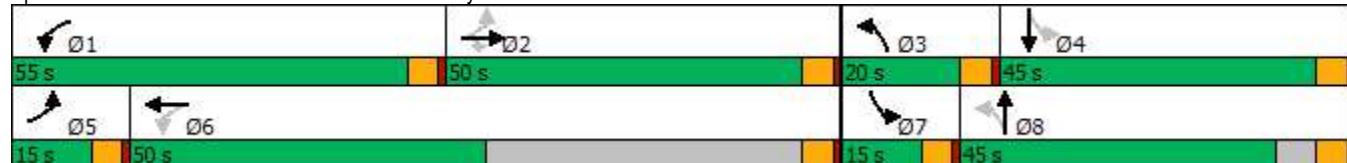
Cycle Length: 170

Actuated Cycle Length: 61

Natural Cycle: 85

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way



HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	14	180	71	301	169	9	120	1	390	25	35	24
Future Volume (veh/h)	14	180	71	301	169	9	120	1	390	25	35	24
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00			1.00	0.98		0.98	0.99	0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No				No			No		
Adj Sat Flow, veh/h/ln	1781	1856	1781	1841	1841	1737	1856	1900	1796	1841	1856	1900
Adj Flow Rate, veh/h	15	189	75	317	178	9	126	1	411	26	37	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	3	8	4	4	11	3	0	7	4	3	0
Cap, veh/h	322	288	232	493	548	28	564	1	499	238	278	188
Arrive On Green	0.02	0.16	0.16	0.18	0.32	0.32	0.07	0.32	0.32	0.03	0.27	0.27
Sat Flow, veh/h	1697	1856	1495	1753	1737	88	1767	4	1569	1753	1020	689
Grp Volume(v), veh/h	15	189	75	317	0	187	126	0	412	26	0	62
Grp Sat Flow(s), veh/h/ln	1697	1856	1495	1753	0	1824	1767	0	1573	1753	0	1709
Q Serve(g_s), s	0.5	6.0	2.8	8.8	0.0	4.9	3.1	0.0	15.2	0.7	0.0	1.7
Cycle Q Clear(g_c), s	0.5	6.0	2.8	8.8	0.0	4.9	3.1	0.0	15.2	0.7	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	322	288	232	493	0	576	564	0	500	238	0	465
V/C Ratio(X)	0.05	0.66	0.32	0.64	0.00	0.32	0.22	0.00	0.82	0.11	0.00	0.13
Avail Cap(c_a), veh/h	561	1332	1073	1578	0	1309	856	0	1003	466	0	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	24.9	23.6	16.1	0.0	16.4	14.4	0.0	19.8	16.8	0.0	17.2
Incr Delay (d2), s/veh	0.0	1.0	0.3	0.5	0.0	0.1	0.1	0.0	1.3	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.6	1.0	3.3	0.0	1.9	1.2	0.0	5.3	0.3	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.6	25.9	23.8	16.6	0.0	16.5	14.5	0.0	21.1	16.8	0.0	17.3
LnGrp LOS	C	C	C	B	A	B	B	A	C	B	A	B
Approach Vol, veh/h					504			538			88	
Approach Delay, s/veh					16.6			19.6			17.1	
Approach LOS					C	B		B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.2	14.7	9.7	22.1	6.1	24.8	6.8	24.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	10.8	8.0	5.1	3.7	2.5	6.9	2.7	17.2				
Green Ext Time (p_c), s	0.5	0.9	0.1	0.2	0.0	0.8	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay				19.4								
HCM 6th LOS				B								



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↓			↑↓	↑↓	
Traffic Volume (vph)	585	4	24	482	1	18
Future Volume (vph)	585	4	24	482	1	18
Confl. Peds. (#/hr)		1	1			2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	25%	0%	4%	0%	14%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	4	24	482	1	18
Traffic Vol, veh/h	585	4	24	482	1	18
Future Vol, veh/h	585	4	24	482	1	18
Conflicting Peds, #/hr	0	1	1	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	6	25	0	4	0	14
Mvmt Flow	657	4	27	542	1	20

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	662	0	1256 662
Stage 1	-	-	-	-	660 -
Stage 2	-	-	-	-	596 -
Critical Hdwy	-	-	4.1	-	6.4 6.34
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.426
Pot Cap-1 Maneuver	-	-	936	-	191 441
Stage 1	-	-	-	-	518 -
Stage 2	-	-	-	-	554 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	935	-	183 440
Mov Cap-2 Maneuver	-	-	-	-	183 -
Stage 1	-	-	-	-	517 -
Stage 2	-	-	-	-	531 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	410	-	-	935	-
HCM Lane V/C Ratio	0.052	-	-	0.029	-
HCM Control Delay (s)	14.3	-	-	9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	3	0	11	0	499	5	11	404	4
Future Volume (vph)	0	0	1	3	0	11	0	499	5	11	404	4
Confl. Peds. (#/hr)							2		5	5		2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop			Free			Free		
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑		↑↑	↑↑	↑↑		↑↑	↑↑	
Traffic Vol, veh/h	0	0	1	3	0	11	0	499	5	11	404	4
Future Vol, veh/h	0	0	1	3	0	11	0	499	5	11	404	4
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	5	5	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	6	0	0	4	0
Mvmt Flow	0	0	1	4	0	13	0	601	6	13	487	5
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1129	1130	492	1125	1129	609	494	0	0	612	0	0
Stage 1	518	518	-	609	609	-	-	-	-	-	-	-
Stage 2	611	612	-	516	520	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	183	205	581	184	206	499	1080	-	-	977	-	-
Stage 1	544	536	-	486	488	-	-	-	-	-	-	-
Stage 2	484	487	-	546	535	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	175	200	580	180	201	497	1078	-	-	972	-	-
Mov Cap-2 Maneuver	175	200	-	180	201	-	-	-	-	-	-	-
Stage 1	543	525	-	484	486	-	-	-	-	-	-	-
Stage 2	471	485	-	535	524	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	11.2		15.5			0			0.2			
HCM LOS	B		C									
Minor Lane/Major Mvmt												
Capacity (veh/h)	1078	-	-	580	361	972	-	-				
HCM Lane V/C Ratio	-	-	-	0.002	0.047	0.014	-	-				
HCM Control Delay (s)	0	-	-	11.2	15.5	8.8	0	-				
HCM Lane LOS	A	-	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	0	0	0	0	1	1	2	0	0	15	14
Future Volume (vph)	15	0	0	0	0	1	1	2	0	0	15	14
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Shared Lane Traffic (%)												
Sign Control	Stop				Stop				Free			Free
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh 3.2												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Vol, veh/h	15	0	0	0	0	1	1	2	0	0	15	14
Future Vol, veh/h	15	0	0	0	0	1	1	2	0	0	15	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	25	0	0	0	0	0	0	0	0	0	0	50
Mvmt Flow	27	0	0	0	0	2	2	4	0	0	27	25
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	49	49	40	49	61	5	52	0	0	5	0	0
Stage 1	40	40	-	9	9	-	-	-	-	-	-	-
Stage 2	9	9	-	40	52	-	-	-	-	-	-	-
Critical Hdwy	7.35	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.35	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.725	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	897	846	1037	956	834	1084	1567	-	-	1630	-	-
Stage 1	919	866	-	1017	892	-	-	-	-	-	-	-
Stage 2	956	892	-	980	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	895	844	1037	954	832	1083	1567	-	-	1628	-	-
Mov Cap-2 Maneuver	895	844	-	954	832	-	-	-	-	-	-	-
Stage 1	918	866	-	1015	890	-	-	-	-	-	-	-
Stage 2	953	890	-	980	856	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	9.1		8.3			2.4			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt												
Capacity (veh/h)	1567	-	-	895	1083	1628	-	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	0.03	0.002	-	-	-	-	-	-	-
HCM Control Delay (s)	7.3	0	-	9.1	8.3	0	-	-	-	-	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-	-	-	-	-

Lanes, Volumes, Timings
1: 2nd Ave NE & E Sunset Way

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	30	282	77	561	330	16	94	11	351	24	15	22
Future Volume (vph)	30	282	77	561	330	16	94	11	351	24	15	22
Confl. Peds. (#/hr)	3		1	1		3	2		34	34		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	1%	6%	7%	2%	0%	1%	9%	3%	0%	0%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	10.0	30.0	30.0	10.0	26.0		10.0	27.0		10.0	32.0	
Total Split (s)	15.0	50.0	50.0	55.0	50.0		20.0	45.0		15.0	45.0	
Total Split (%)	8.8%	29.4%	29.4%	32.4%	29.4%		11.8%	26.5%		8.8%	26.5%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	

Intersection Summary

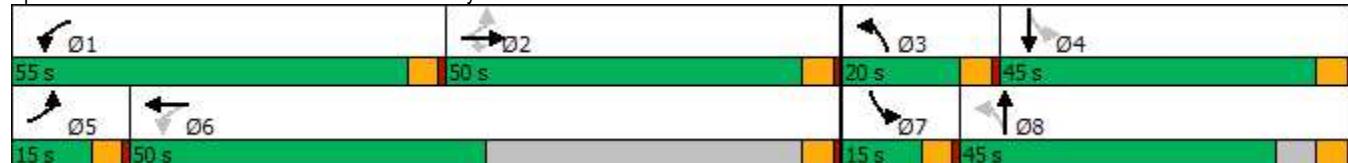
Cycle Length: 170

Actuated Cycle Length: 93.9

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: 2nd Ave NE & E Sunset Way



HCM 6th Signalized Intersection Summary

1: 2nd Ave NE & E Sunset Way

07/29/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	30	282	77	561	330	16	94	11	351	24	15	22
Future Volume (veh/h)	30	282	77	561	330	16	94	11	351	24	15	22
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.94		0.94	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1856	1885	1811	1796	1870	1900	1885	1767	1856	1900	1900	1826
Adj Flow Rate, veh/h	31	294	80	584	344	17	98	11	366	25	16	23
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	1	6	7	2	0	1	9	3	0	0	5
Cap, veh/h	312	355	287	617	808	40	487	12	402	152	176	253
Arrive On Green	0.03	0.19	0.19	0.30	0.46	0.46	0.06	0.29	0.29	0.02	0.26	0.26
Sat Flow, veh/h	1767	1885	1523	1711	1767	87	1795	41	1377	1810	675	970
Grp Volume(v), veh/h	31	294	80	584	0	361	98	0	377	25	0	39
Grp Sat Flow(s), veh/h/ln	1767	1885	1523	1711	0	1854	1795	0	1418	1810	0	1645
Q Serve(g_s), s	1.4	15.2	4.6	27.1	0.0	13.3	4.0	0.0	26.0	1.0	0.0	1.8
Cycle Q Clear(g_c), s	1.4	15.2	4.6	27.1	0.0	13.3	4.0	0.0	26.0	1.0	0.0	1.8
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.97	1.00		0.59
Lane Grp Cap(c), veh/h	312	355	287	617	0	848	487	0	414	152	0	429
V/C Ratio(X)	0.10	0.83	0.28	0.95	0.00	0.43	0.20	0.00	0.91	0.16	0.00	0.09
Avail Cap(c_a), veh/h	435	838	677	953	0	848	652	0	560	286	0	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.6	39.5	35.2	22.6	0.0	18.5	24.9	0.0	34.6	28.8	0.0	28.4
Incr Delay (d2), s/veh	0.1	1.9	0.2	10.3	0.0	0.1	0.1	0.0	13.4	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.6	7.2	1.7	12.3	0.0	5.7	1.7	0.0	10.4	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	41.4	35.4	32.9	0.0	18.7	25.0	0.0	48.0	29.0	0.0	28.4
LnGrp LOS	C	D	D	C	A	B	C	A	D	C	A	C
Approach Vol, veh/h					945			475				64
Approach Delay, s/veh					27.5			43.2				28.6
Approach LOS					C			D				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.1	24.1	10.7	31.4	7.9	51.3	7.5	34.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	50.0	45.0	15.0	40.0	10.0	45.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	29.1	17.2	6.0	3.8	3.4	15.3	3.0	28.0				
Green Ext Time (p_c), s	1.0	1.4	0.1	0.1	0.0	1.6	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay				34.1								
HCM 6th LOS				C								



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (vph)	663	3	26	895	1	20
Future Volume (vph)	663	3	26	895	1	20
Confl. Peds. (#/hr)		3	3		5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	4%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	Y	
Traffic Vol, veh/h	663	3	26	895	1	20
Future Vol, veh/h	663	3	26	895	1	20
Conflicting Peds, #/hr	0	3	3	0	0	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	0	4	0	0
Mvmt Flow	713	3	28	962	1	22

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	719	0	1736 723
Stage 1	-	-	-	-	718 -
Stage 2	-	-	-	-	1018 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	892	-	97 430
Stage 1	-	-	-	-	487 -
Stage 2	-	-	-	-	352 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	889	-	90 427
Mov Cap-2 Maneuver	-	-	-	-	90 -
Stage 1	-	-	-	-	486 -
Stage 2	-	-	-	-	328 -

Approach	EB	WB	NB	
HCM Control Delay, s	0	0.3	15.6	
HCM LOS			C	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	362	-	-	889	-
HCM Lane V/C Ratio	0.062	-	-	0.031	-
HCM Control Delay (s)	15.6	-	-	9.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings

3: 2nd Ave NE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	3	3	0	12	0	519	3	10	588	3
Future Volume (vph)	2	0	3	3	0	12	0	519	3	10	588	3
Confl. Peds. (#/hr)							2		25	25		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control	Stop			Stop			Free			Free		
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑			↑↑		↑↑	↑↑	↑↑		↑↑	↑↑	↑↑
Traffic Vol, veh/h	2	0	3	3	0	12	0	519	3	10	588	3
Future Vol, veh/h	2	0	3	3	0	12	0	519	3	10	588	3
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	25	25	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	4	0
Mvmt Flow	2	0	3	3	0	13	0	541	3	10	613	3
Major/Minor		Minor2			Minor1			Major1			Major2	
Conflicting Flow All	1186	1206	617	1204	1206	568	618	0	0	569	0	0
Stage 1	637	637	-	568	568	-	-	-	-	-	-	-
Stage 2	549	569	-	636	638	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	167	185	494	162	185	526	972	-	-	1013	-	-
Stage 1	469	475	-	511	510	-	-	-	-	-	-	-
Stage 2	524	509	-	469	474	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	161	177	493	155	177	513	970	-	-	989	-	-
Mov Cap-2 Maneuver	161	177	-	155	177	-	-	-	-	-	-	-
Stage 1	468	467	-	499	498	-	-	-	-	-	-	-
Stage 2	511	497	-	459	466	-	-	-	-	-	-	-
Approach		EB			WB			NB			SB	
HCM Control Delay, s	18.6				15.7			0			0.1	
HCM LOS	C				C							
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1		SBL	SBT	SBR		
Capacity (veh/h)	970	-	-	270	351	989	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	0.019	0.045	0.011	-	-	-	-		
HCM Control Delay (s)	0	-	-	18.6	15.7	8.7	0	-	-	-		
HCM Lane LOS	A	-	-	C	C	A	A	-	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-	-	-		

Lanes, Volumes, Timings

4: 4th PI SE & Alley

07/29/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	0	0	2	0	4	0	6	0	4	15	15
Future Volume (vph)	12	0	0	2	0	4	0	6	0	4	15	15
Confl. Peds. (#/hr)										2	2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control	Stop				Stop				Free			Free
Intersection Summary												
Control Type: Unsigned												

Intersection												
Int Delay, s/veh 3.2												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Vol, veh/h	12	0	0	2	0	4	0	6	0	4	15	15
Future Vol, veh/h	12	0	0	2	0	4	0	6	0	4	15	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	0	0	2	0	5	0	7	0	5	18	18
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	47	46	27	46	55	9	36	0	0	9	0	0
Stage 1	37	37	-	9	9	-	-	-	-	-	-	-
Stage 2	10	9	-	37	46	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	959	850	1054	961	840	1079	1588	-	-	1624	-	-
Stage 1	984	868	-	1017	892	-	-	-	-	-	-	-
Stage 2	1016	892	-	984	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	952	846	1054	957	836	1077	1588	-	-	1621	-	-
Mov Cap-2 Maneuver	952	846	-	957	836	-	-	-	-	-	-	-
Stage 1	984	865	-	1015	890	-	-	-	-	-	-	-
Stage 2	1012	890	-	981	858	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	8.8		8.5			0			0.9			
HCM LOS	A		A									
Minor Lane/Major Mvmt												
Capacity (veh/h)	1588	-	-	952	1034	1621	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	0.015	0.007	0.003	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	8.8	8.5	7.2	0	-	-	-	-	-
HCM Lane LOS	A	-	-	A	A	A	A	-	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-	-	-	-	-